



LCD-Monitor

Chassis : LS22TDS / LS20TDS

Model : T220M / T200M

SERVICEManual

TFT-LCD Monitor



T220M / T200M

Contents

1. Precautions
2. Product specifications
3. Disassembly and Reassemble
4. Troubleshooting
5. Exploded View & Part List
6. Wiring Diagram
7. Schematic Diagram

Contents

| | |
|--|------------|
| 1. Precautions | 1-1 |
| 1-1. Safety Precautions | 1-1 |
| 1-2. Servicing Precautions | 1-2 |
| 1-3. Static Electricity Precautions | 1-2 |
| 1-4. Installation Precautions | 1-3 |
| 2. Product specifications | 2-1 |
| 2-1. Feature & Specifications | 2-1 |
| 2-2. Spec Comparison to the Old Models | 2-3 |
| 2-3. Accessories | 2-4 |
| 3. Disassembly and Assembly | 3-1 |
| 3-1. Disassembly | 3-1 |
| 4. Troubleshooting | 4-1 |
| 4-1. First Checklist for Troubleshooting | 4-1 |
| 4-2. No Power | 4-2 |
| 4-3. No Video (Analog PC) | 4-4 |
| 4-4. No Video (Digital-HDMI) | 4-7 |
| 4-5. No Picture (Tuner_CVBS) | 4-10 |
| 4-6. No Picture (AV) | 4-13 |
| 4-7. No Picture (S-VIDEO) | 4-16 |
| 4-8. No Picture (Component) | 4-19 |
| 4-9. No Sound | 4-22 |
| 4-10. Faults and Corrective Actions | 4-25 |
| 4-11. Adjustment | 4-26 |
| 4-13. Service Adjustment | 4-27 |
| 5. Exploded View & Part List | 5-1 |
| 5-1. Exploded View -20" | 5-1 |
| 5-2. Parts List | 5-3 |
| 5-3. Exploded View -22" | 5-20 |
| 5-4. Parts List | 5-22 |
| 6. Wiring Diagram | 6-1 |
| 6-1. Wiring Diagram - Main Board | 6-1 |
| 6-2. Wiring Diagram - IP Board | 6-2 |
| 6-3. Connector Functions | 6-3 |
| 6-4. Cables | 6-3 |
| 7. Schematic Diagram | 7-1 |
| 7-1. Circuit Descriptions | 7-1 |
| 7-2. Block description | 7-2 |
| 7-3. Schematic Diagrams | 7-3 |
| 7-3-1. Schematic Diagrams (POWER) | 7-3 |
| 7-3-2. Schematic Diagrams (SOUND) | 7-4 |
| 7-3-3. Schematic Diagrams -SIGNAL INPUT (HDMI) | 7-5 |
| 7-3-4. Schematic Diagrams - SIGNAL INPUT (Component) | 7-6 |
| 7-3-5. Schematic Diagrams - Scaler/LVDS Output | 7-7 |
| 7-3-6. Schematic Diagrams - Tuner | 7-8 |
| 7-3-7. Schematic Diagrams - PCMCIA | 7-9 |
| 7-3-8. Schematic Diagrams - TV PCMCIA | 7-10 |
| 7-3-9. Schematic Diagrams - SIGNAL INPUT (DVI) | 7-11 |



GSPN (Global Service Partner Network)

| Area | Web Site |
|------------------|---|
| North America | http://service.samsungportal.com |
| Latin America | http://latin.samsungportal.com |
| CIS | http://cis.samsungportal.com |
| Europe | http://europe.samsungportal.com |
| China | http://china.samsungportal.com |
| Asia | http://asia.samsungportal.com |
| Mideast & Africa | http://mea.samsungportal.com |

This Service Manual is a property of Samsung Electronics Co.,Ltd.
Any unauthorized use of Manual can be punished under applicable
International and/or domestic law.

© 2008 Samsung Electronics Co.,Ltd.
All rights reserved.
Printed in Korea
P/N: BN82-00479A-00

1. Precautions

1-1. Safety Precautions

Follow these safety, servicing and ESD precautions to prevent damage and to protect against potential hazards such as electrical shock.

1-1-1. Warnings

1. For continued safety, do not attempt to modify the circuit board.
2. Disconnect the AC power and DC power jack before servicing.

1-1-2. Servicing the LCD Monitor

1. When servicing the LCD Monitor, Disconnect the AC line cord from the AC outlet.
2. It is essential that service technicians have an accurate voltage meter available at all times. Check the calibration of this meter periodically.

1-1-3. Fire and Shock Hazard

Before returning the monitor to the user, perform the following safety checks:

1. Inspect each lead dress to make certain that the leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the monitor.
2. Inspect all protective devices such as nonmetallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor/capacitor networks, mechanical insulators, etc.
3. Leakage Current Hot Check (Figure 1-1):

WARNING : Do not use an isolation transformer during this test.

Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).

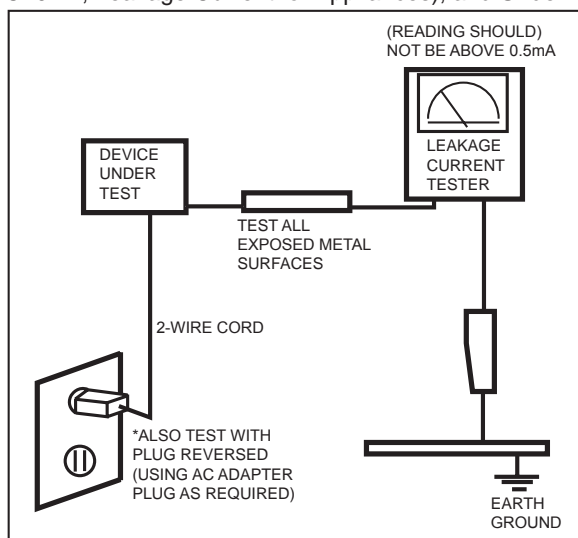



Figure 1-1. Leakage Current Test Circuit

4. With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

1-1-4. Product Safety Notices

Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection. The protection they give may not be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by  on schematics and parts lists. A substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire and/or other hazards. Product safety is under review continuously and new instructions are issued whenever appropriate.

1-2. Servicing Precautions

WARNING: An electrolytic capacitor installed with the wrong polarity might explode.

Caution: Before servicing units covered by this service manual, read and follow the Safety Precautions section of this manual.

Note: If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions, always follow the safety precautions.

1-2-1 General Servicing Precautions

1. Always unplug the unit's AC power cord from the AC power source and disconnect the DC Power Jack before attempting to:
(a) remove or reinstall any component or assembly, (b) disconnect PCB plugs or connectors, (c) connect a test component in parallel with an electrolytic capacitor.
2. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
3. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the area around the serviced part has not been damaged.
4. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
5. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500 V) to the blades of the AC plug. The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
6. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3. Static Electricity Precautions

Some semiconductor (solid state) devices can be easily damaged by static electricity. Such components are commonly called Electrostatically Sensitive Devices (ESD). Examples of typical ESD are integrated circuits and some field-effect transistors. The following techniques will reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. To avoid a shock hazard, be sure to remove the wrist strap before applying power to the monitor.
2. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of an electrostatic charge.
3. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESDs.
4. Use only a grounded-tip soldering iron to solder or desolder ESDs.
5. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESDs.
6. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
7. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
Caution: Be sure no power is applied to the chassis or circuit and observe all other safety precautions.
8. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting your foot from a carpeted floor can generate enough static electricity to damage an ESD.

1-4. Installation Precautions

1. For safety reasons, more than two people are required for carrying the product.
2. Keep the power cord away from any heat emitting devices, as a melted covering may cause fire or electric shock.
3. Do not place the product in areas with poor ventilation such as a bookshelf or closet. The increased internal temperature may cause fire.
4. Bend the external antenna cable when connecting it to the product. This is a measure to protect it from being exposed to moisture. Otherwise, it may cause a fire or electric shock.
5. Make sure to turn the power off and unplug the power cord from the outlet before repositioning the product. Also check the antenna cable or the external connectors if they are fully unplugged. Damage to the cord may cause fire or electric shock.
6. Keep the antenna far away from any high-voltage cables and install it firmly. Contact with the highvoltage cable or the antenna falling over may cause fire or electric shock.
7. When installing the product, leave enough space (10cm) between the product and the wall for ventilation purposes. A rise in temperature within the product may cause fire.

Memo

2. Product specifications



2-1. Feature & Specifications

| Model | T220M / T200M | |
|---|---|--|
| Feature | | |
| <div><div>▶ Supreme Digital Interface & Networking</div><div>- With a built-in with no particular set-top box and provides simple access with a single remote control.</div><div>▶ Excellent Picture Quality</div><div>- DNle technology provides life-like clear images.</div><div>▶ Dynamic Contrast</div><div>- Automatically detects the input visual signal and adjusts to create optimum contrast.</div><div>▶ Convenience</div><div>-The TV utilizes the HDMI system to implement perfect digital sound and picture quality.</div></div> | | |
| Specifications | | |
| Item | Description | |
| | T220M | T200M |
| LCD Panel | TFT-LCD Panel, RGB Vertical strip, normally White, 22-Inch viewable, 0.282(H) X 0.282(V)mm Pixel Pitch | TFT-LCD Panel, RGB Vertical strip, normally White, 20.1-Inch viewable, 0.258(H) X 0.258(V)mm Pixel Pitch |
| Scanning Frequency | Horizontal : 30KHz ~ 81KHz(Automatic) Vertical: 56Hz ~ 75Hz(Automatic) | Horizontal :30KHz ~ 81KHz(Automatic) Vertical:56Hz ~ 75Hz(Automatic) |
| Display Colors | 16.7 Million colors | 16.7Million colors |
| Maximum resolution | Horizontal: 1680pixels Vertical: 1050pixels | Horizontal : 1680pixels Vertical:1050pixels |
| Input Signal | Analog 0.7Vp-p±10% positive at 75Ω,internally terminated | Analog 0.7Vp-p±10% positive at 75Ω,internally terminated |
| Input Sync Signal | Type: separate H/V,composite Level : TTL Level | Type: separate H/V,composite Level : TTL Level |
| Maximum Pixel Clock rate | 146.250MHz | 146.250MHz |
| Active Display (Horizontal/Vertical) | 473.76(H) X 296.1(V) | 433.44(H) X 270.9(V) |
| AC power voltage & Frequency | AC 110 ~ 240V, 50 ~ 60 Hz | AC110 ~ 240V, 50 ~ 60Hz |
| Power Consumption | 54W < 2W | 50W < 2W |
| Dimensions Set (W x D x H) | 520x215x441.5mm (After installation stand) 520x86.5x373.5mm (Without stand) | 486x215x417.5mm (After installation stand) 486x86x350mm (Without stand) |
| Weight Set (After installation Stand) | 6.2kg | 6.0kg |
| TV System | Tuning | Frequency Synthesize |
| | System | NT3.58, PAL-M, PAL-N |
| | Sound | MONO, STEREO |
| Environmental Considerations | Operating Temperature: 50°C ~ 104°F(10°C ~ 40°C) Operating Humidity : 10% ~ 80% Storage Temperature: -4°C ~ 113°C(-20°C ~ 45°C) Storage Humidity: 5% ~ 95% | |

2. Product specifications

| Specifications | | |
|----------------------|--|-------|
| Item | Description | |
| | T220M | T200M |
| Antenna Input | 75Ω | |
| Sound Characteristic | <ul style="list-style-type: none">-MAX Internal speaker Out : Right : 3W / Left : 3W-BASS Control Range : -8 dB ~ + 8dB-TREBLE Control Range : -8 dB ~ +8 dB-Headphone Out : 10 mW MAX-Output Frequency : RF : 80 Hz ~ 15 kHzA/V : 80 Hz ~ 20 kHz | |

2-2. Spec Comparison to the Old Models


| Model | T220M / T200M | Curie (225MD) |
|--|---|---|
| Design |  |  |
| Screen Size | 20" / 22" | 22" |
| Frequency Horizontal Vertical Display Color | 30 ~ 81 kHz 56 ~ 75 Hz 16,777,216 colors | 30 ~ 81 kHz 56 ~ 75 Hz 16,777,216 colors |
| PC Resolution Maximum mode | WSXGA+, 1680 x 1050 @ 60 Hz | 1680 x 1050 |
| Input Signal Sync Signal Video Signal | H/V Separate, TTL, P. or N. 0.7 Vp-p @ 75ohm | H/V Separate, TTL, P. or N. 0.7 Vp-p @ 75ohm |
| Power Consumption Normal Power Saving | 22" 54W < 2W 20" 50W < 2W | 58W < 2W |

*Color Effect

- Grey scale: Images are displayed in a grey tone on the screen.
- Green: Images are displayed in a green tone on the screen.
- Aqua: Images are displayed in a blue tone on the screen.
- Sepia: Images are displayed in a brown tone on the screen.


Image Size : If the resolution is not wide resolution, this option allows the screen size to be selected as normal or wide.

2-3. Accessories


| Product | Description | Ccde. No | Remark |
|---|--|-------------|---------------------------------------|
|  | Remote Control & Batteries (AAA x 2) | BN59-00678A | Samsung Electronics Service center |
|  | Power Cord | 3903-000190 | |
|  | Stand Body | BN96-07347D | |
|  | Stand Base | BN96-07345A | |
|  | D-Sub Cable | BN39-00244G | |
|  | User's Guide, Monitor Driver, Natural Color Pro Software | BN96-07540A | |
|  | Cleaning Cloth | BN63-01798A | |





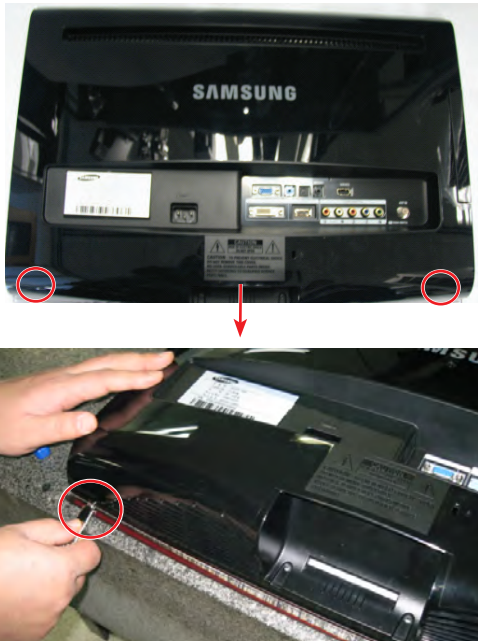
3. Disassembly and Assembly

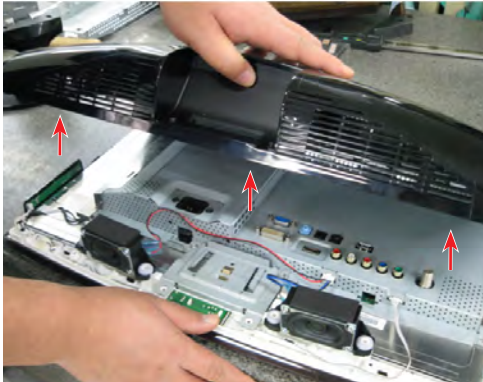
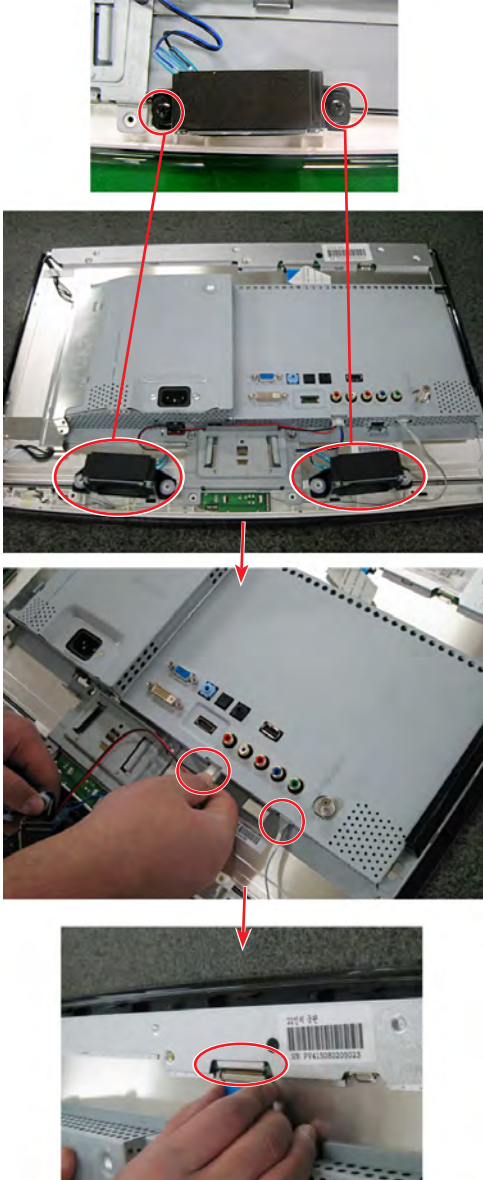

This section describes the disassembly and reassembly sequences for this monitor.

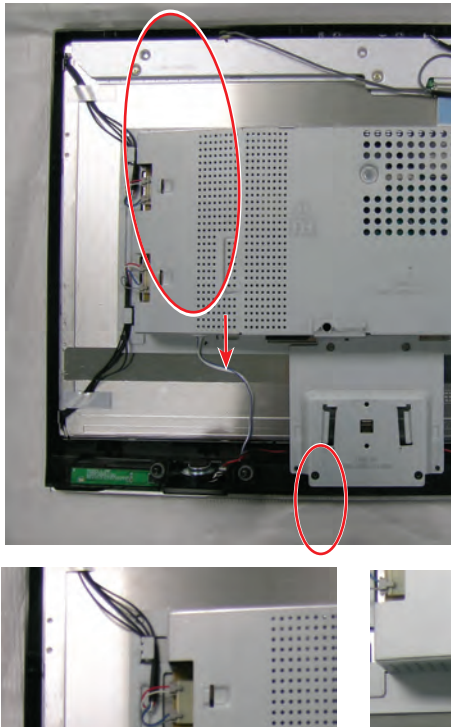
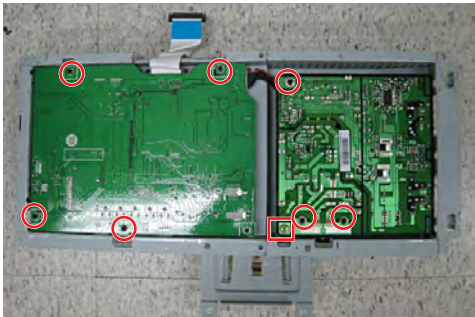

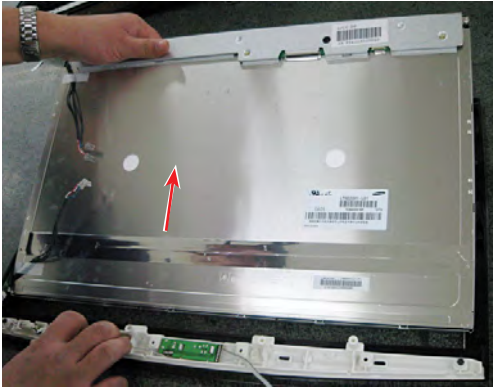
 **Warning:** As this monitor has parts that are sensitive to static electricity, be careful when handling them.

3-1. Disassembly


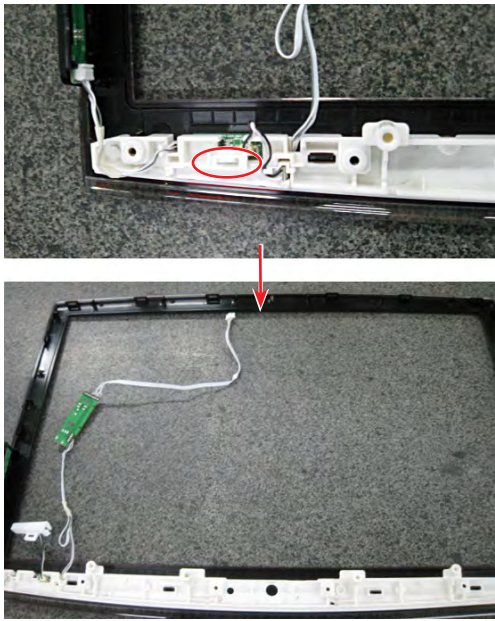
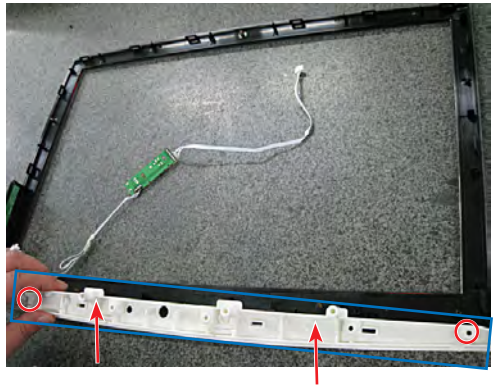

-  **Caution:**
1. Turn the monitor off before beginning the disassembly process.
 2. When disassembling the monitor, do not use any metal tools except for the provided jig.
 3. Remove the signal cable and the power cord before beginning the disassembly.

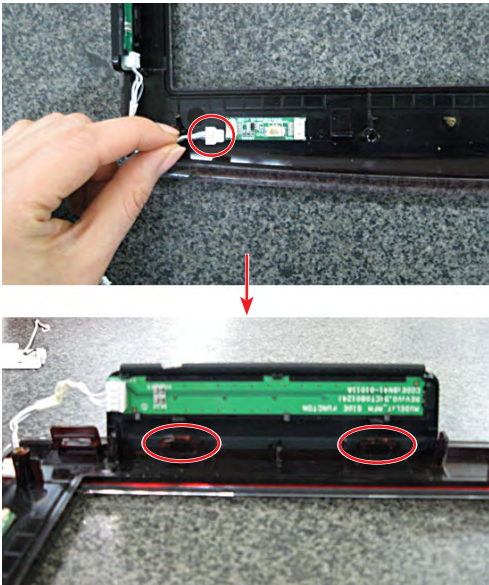

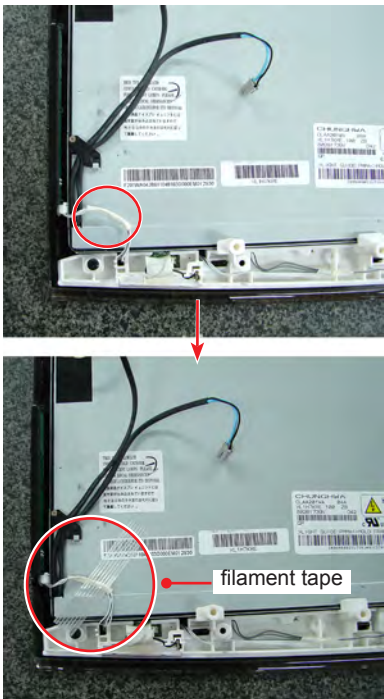
| Description | Photo | Screws |
|--|--|---|
| <p>1. Place monitor face down on cushioned table. Remove Stand, then remove 2 marked screws from the rear cover.</p> <p> Caution : If you do not tilt the stand and use too much force to remove it, the connection pin may break.</p> |  |  |
| <p>2. Remove the cover and the LCD panel using the provided jig on both grooves at the bottom.</p> <p> Caution : Remove the cover and the LCD panel using the provided jig on both grooves at the bottom.</p> |  | |

| Description | Photo | Screws |
|---|---|---|
| <p>3. Insert a flat screwdriver into the groove and then lift up and remove the cover.</p> |  | |
| <p>4. After remove COVER-REAR, then disconnect SPEAKER , FUNCTION wire.</p> <p>5. Disconnect LVDS cable from panel.</p> |  |  |

| Description | Photo | Screws |
|--|--|--|
| <p>6. After disconnecting SHIELD-LAMP of left side, disassemble lamp wire between panel and IP Board.</p> |  | |
| <p>7. Remove 8 marked SCREW of left picture. Disconnect IP board.</p> <p>※ Reassembly procedures are in the reverse order of disassembly procedures.</p> |  |  |
| <p>8. Remove the LCD panel.</p> |  | |

3. Disassembly and Assembly

| Description | Photo | Screws |
|--|--|---|
| 9. Remove the IR module by tilting the left snap to the right. |  | |
| 10. Remove the LED module by sliding the snap designated in the right figure backwards. |  | |
| 11. Remove the two (2) screws and then remove the holders from the four (4) snaps designated in the right figure using the provided jig. |  |  |

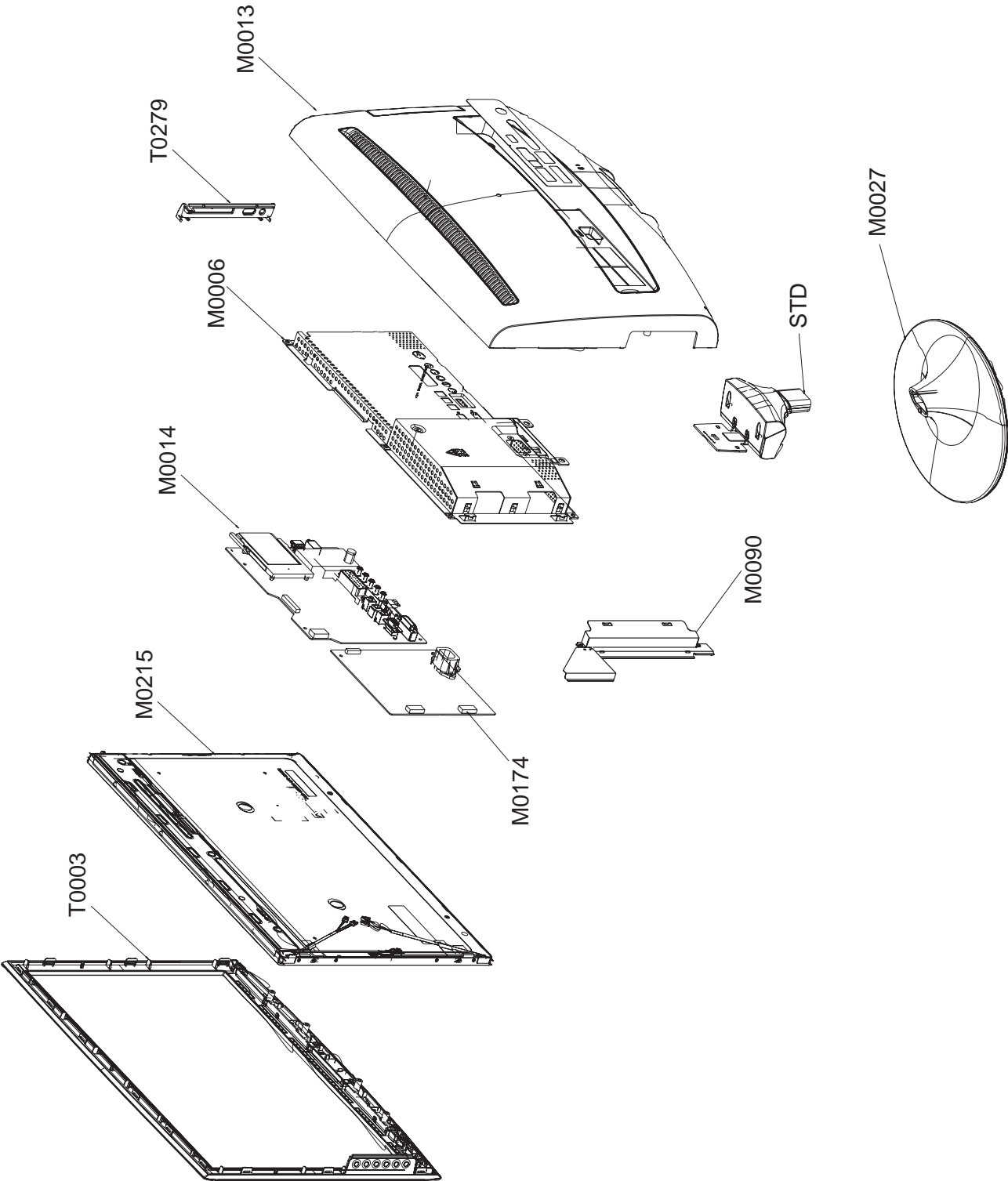
| Description | Photo | Screws |
|---|--|--------|
| <p>12. Remove the two (2) connectors.</p> <p>⚠ Caution : Servicing is not supported for the PCB.</p> |  | |
| <p>► Assembly</p> <p>13. The assembly is in the reverse order of the disassembly.</p> <p>14. Connect the disassembled snap and the LED module again.</p> |  | |
| <p>15. Fix the connecting wire with filament tape</p> <p>⚠ Caution : If the wire is damaged when closing the cover, an operating error may occur. Therefore, make sure to close the cover after fixing it with filament tape.</p> |  | |

※ The assembly is in the reverse order of disassembly.

Memo

5. Exploded View & Part List

5-1. LS20TDSSUMZD - Exploded View (T220M)



5-1-1. LS20TDSSUMZD - Parts List (T220M)

| Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|--------------|-------------|--|------|--------|--------|
| M0006 | BN96-08149G | ASSY SHIELD P-COVER;LS20TD(ANALOG),SECC | 1 | S.N.A | |
| M0013 | BN96-07447H | ASSY COVER P-REAR;LS20TD(ANALOG),PMMA AB | 1 | S.A | |
| M0014 | BN94-01893R | ASSY PCB MAIN;LS20TDSSU/ZB | 1 | S.A | |
| M0027 | BN96-07345B | ASSY STAND P-BASE;LS22TW,ABS HB PMMA,RD0 | 1 | S.A | |
| M0090 | BN96-08016A | ASSY SHIELD P-LAMP;LS20TD(MFM),SPTE,T 0. | 1 | S.N.A | |
| M0174 | BN44-00177D | IP BOARD;PWI2204ST(A),T 20" MFM,1.4 ~2.8 | 1 | S.A | |
| M0215 | BN07-00374A | LCD-PANEL;CLAA201WA04 | 1 | S.A | |
| STD | BN96-07347D | ASSY STAND P-BODY;LS22TD,PMMA ABS HB, SM | 1 | S.A | |
| T0003 | BN96-07446L | ASSY COVER P-FRONT;LS20TD,BRAZIL,PMMA+AB | 1 | S.A | |
| T0279 | BN63-05063A | COVER-JACK;T220M ANALOG,ABS + PC,HB,BK26 | 1 | S.N.A | |

5-2. LS20TDSSUMZD Parts List

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|--------|--------------|--------------|--|------|--------|--------|
| | | LS20TDSSUMZD | T200M,WST1/S20A4-LTD,20,LCD-MO,BRAZIL | | | |
| 0.1 | M0001 | BN90-01634H | ASSY COVER FRONT;LS20TD_MFM,TOC,ROSE BLA | 1 | S.N.A | |
| ..2 | M0081 | 6006-001096 | SCREW-TAPTITE;BH,+,WP,B,M4.0,L12,ZPC(BLK | 4 | S.N.A | |
| ..2 | T0175 | BN96-06823C | ASSY SPEAKER P;16ohm,T-project,MFM,3W,11 | 1 | S.A | |
| ...3 | | BN83-00813A | CKD-SPEAKER;Bordeaux New Rubber,pi 15 x | 4 | S.N.A | |
| ...3 | | BN83-01026A | CKD-SPEAKER;L530 32" Fullrange Sleeve-#1 | 2 | S.N.A | |
| ...3 | | BN83-01027A | CKD-SPEAKER;L530 32" Fullrange Sleeve-#1 | 2 | S.N.A | |
| ...3 | | BN83-01322A | CKD-SPEAKER;T-MFM Speaker Unit,63mm X 35 | 2 | S.N.A | |
| ...3 | | BN83-01323A | CKD-SPEAKER;T-MFM Speaker Holder,95mm X | 2 | S.N.A | |
| ...3 | | BN83-01324A | CKD-SPEAKER;T-MFM Speaker Wire Ass'y,4Pi | 1 | S.N.A | |
| ...3 | | BN83-01325A | CKD-SPEAKER;T-MFM Speaker Cushion,52 X23 | 2 | S.N.A | |
| ...3 | | BN83-01326A | CKD-SPEAKER;T-MFM Speaker Label,20mmX10m | 1 | S.N.A | |
| ...3 | | BN83-00781A | CKD-SPEAKER;Bordeaux26 Screw,pi3 * 6mm | 8 | S.N.A | |
| ..2 | T0003 | BN96-07446L | ASSY COVER P-FRONT;LS20TD,BRAZIL,PMMA+AB | 1 | S.A | |
| ...3 | M0081 | 6003-000282 | SCREW-TAPTITE;BH,+,-,B,M3,L8,ZPC(BLK),SW | 2 | S.N.A | |
| ...3 | M0960 | BN61-03932A | HOLDER-BOSS;T200,PMMA+ABS HB,WH15 | 1 | S.N.A | |
| ...3 | CCM1 | BN63-02183D | COVER-SHEET;Rhcm,PE Vinyl,T0.05,680mm,20 | 1 | S.N.A | |
| ...3 | M0112 | BN63-04426X | COVER-FRONT;LS20TD(ANALOG),PMMA+ABS,ROSE | 1 | S.N.A | |
| ...3 | M0145 | BN96-07556D | ASSY BOARD P-FUNCTION;T220HD,CT5000-5800 | 1 | S.A | |
|4 | | BN94-02473F | ASSY PCB MAIN-FUNCTION PCB;LS22TDSSUMZD | 1 | S.N.A | |
|5 | M2893 | BN39-01051B | LEAD CONNECTOR;T-MFM24,UL1571#30,UL1571# | 1 | S.A | |
|5 | T0174 | BN97-02920J | ASSY SMD;LS22TDSSUMZD | 1 | S.N.A | |
|6 | D3 | 0406-001172 | DIODE-TVS;CDS3C30GTH,48/-50V,SMD | 1 | S.A | |
|6 | D4 | 0406-001172 | DIODE-TVS;CDS3C30GTH,48/-50V,SMD | 1 | S.A | |
|6 | R6 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|6 | R7 | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|6 | R1 | 2007-000121 | R-CHIP;820ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|6 | R4 | 2007-000121 | R-CHIP;820ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|6 | R2 | 2007-000124 | R-CHIP;2.2Kohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|6 | R5 | 2007-000124 | R-CHIP;2.2Kohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|6 | C3 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|6 | C4 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|6 | T0313 | 3404-001209 | SWITCH-TACT;12VDC,50mA,250gf,4.5x4.5x1.5 | 1 | S.A | |
|6 | T0313 | 3404-001209 | SWITCH-TACT;12VDC,50mA,250gf,4.5x4.5x1.5 | 1 | S.A | |
|6 | T0313 | 3404-001209 | SWITCH-TACT;12VDC,50mA,250gf,4.5x4.5x1.5 | 1 | S.A | |
|6 | T0313 | 3404-001209 | SWITCH-TACT;12VDC,50mA,250gf,4.5x4.5x1.5 | 1 | S.A | |
|6 | T0313 | 3404-001209 | SWITCH-TACT;12VDC,50mA,250gf,4.5x4.5x1.5 | 1 | S.A | |
|6 | T0313 | 3404-001209 | SWITCH-TACT;12VDC,50mA,250gf,4.5x4.5x1.5 | 1 | S.A | |
|6 | T0077 | BN41-01011A | PCB MAIN;T220HD,FR-4,2L,PCB1.0,1.0T | 1 | S.N.A | |
|4 | | BN94-02473K | ASSY PCB MAIN-IR PCB;LS22TDSSUMZD | 1 | S.N.A | |
|5 | M2893 | BN39-01052B | LEAD CONNECTOR;T200HD,UL1571#30,UL,5P,20 | 1 | S.A | |
|5 | M2893 | BN39-01053A | LEAD CONNECTOR;T220D,UL1571#30,8P,200mm, | 1 | S.A | |
|5 | T0174 | BN97-02902J | ASSY SMD;LS22TDSSUMZD | 1 | S.N.A | |
|6 | D1 | 0403-000510 | DIODE-ZENER;MTZJ6.2B,5.96-6.27V,500mW,DO | 1 | S.A | |
|6 | R1 | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | 1 | S.N.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|--------|--------------|-------------|--|-------|--------|--------|
|6 | C | 2401-001507 | C-AL;47uF,20%,16V,GP,TP,6.3x5,5 | 1 | S.A | |
|6 | T0077 | BN41-01013A | PCB MAIN;T220D,FR-1,1L,PCB1.0,1.6T | 1 | S.N.A | |
|5 | D0254 | 0609-001204 | MODULE REMOCON;HORIZONTAL,6.5mm,TR | 1 | S.N.A | |
|4 | | BN94-02473N | ASSY PCB MAIN-POWER PCB;LS22TDSSUMZD | 1 | S.N.A | |
|5 | | BN81-02334A | A/S-DOUBLE SIDE TAPE;T MFM POWER,103*52, | 1 | S.N.A | |
|5 | T0174 | BN97-02902K | ASSY SMD;LS22TDSSUMZD | 1 | S.N.A | |
|6 | R1 | 2007-000819 | R-CHIP;390Kohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|6 | C1 | 2203-000125 | C-CER,CHIP;1.2nF,10%,50V,X7R,TP,1608,- | 1 | S.A | |
|6 | C5 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|6 | CN330 | 3711-002162 | HEADER-BOARD TO CABLE;BOX,2P,1R,1.25mm,S | 1 | S.A | |
|6 | CN330 | 3711-005935 | HEADER-BOARD TO CABLE;BOX,4P,1R,1mm,SMD- | 1 | S.A | |
|6 | CN906 | 3711-006471 | CONNECTOR-HEADER;BOX,5P,1R,1mm,SMD-A,AU, | 1 | S.N.A | |
|6 | IC125 | BN13-00007A | IC ASIC;ADA03,6,2.2 TO 6.5 V,-20 TO +75 | 1 | S.N.A | |
|6 | T0077 | BN41-01012A | PCB MAIN;T220D,FR-4,2L,PCB1.0,1.6T | 1 | S.N.A | |
|5 | M0102 | BN96-07569B | ASSY BLU P;T220HD,A7-10040180-A0,WHITE,B | 1 | S.A | |
| ...3 | | BN64-00843A | KNOB-GUIDE;T220HD,PMMA ABS,HB,BK23,H/GLO | 1 | S.N.A | |
| ...3 | T0022 | BN64-00845A | KNOB CONTROL;T220HD,PMMA ABS,HB,BK23,H/G | 1 | S.N.A | |
| | | | | | | |
| 0.1 | M0002 | BN90-01635D | ASSY COVER REAR;LS20TD_MFM,ANALOG | 1 | S.N.A | |
| ..2 | M0013 | BN96-07447H | ASSY COVER P-REAR;LS20TD(ANALOG),PMMA AB | 1 | S.A | |
| ...3 | M0081 | 6003-000282 | SCREW-TAPTITE;BH,+,-,B,M3,L8,ZPC(BLK),SW | 2 | S.N.A | |
| ...3 | | BN61-03947A | GUIDE-CONTROL;T200D / T220D / T240D / T2 | 2 | S.N.A | |
| ...3 | CCM1 | BN63-02183D | COVER-SHEET;Rhcm,PE Vinyl,T0.05,680mm,20 | 0.5 | S.N.A | |
| ...3 | M0006 | BN63-04435A | COVER-REAR;T200D,PMMA+ABS,HB,BK23,H/GLOS | 1 | S.N.A | |
| ...3 | T0071 | BN64-00959A | INLAY-TERMINAL;T220N ANALOG,PS SHEET T0. | 1 | S.N.A | |
| ...3 | M0126 | BN73-00096A | RUBBER-PANEL;BI19BS,RUBBER,T1.0,50~60,NT | 2 | S.N.A | |
| ...3 | T0151 | BN64-00861A | DOOR-CONTROL;T(20W MFM),ABS HB,BK23,H/G | 1 | S.N.A | |
| ..2 | M0081 | 6003-001086 | SCREW-TAPTITE;BH,+,-,B,M3,L12,ZPC(BLK),S | 4 | S.A | |
| | | | | | | |
| 0.1 | M0135 | BN91-01517B | ASSY LCD-PTZ;LS20MEW* | 1 | S.N.A | |
| ..2 | M0215 | BN07-00374A | LCD-PANEL;CLAA201WA04 | 1 | S.A | |
| | | | | | | |
| 0.1 | M0112 | BN91-02443C | ASSY SHIELD;LS20TD_MFM,TOC,ANALOG | 1 | S.N.A | |
| ..2 | T0279 | BN63-05063A | COVER-JACK;T220M ANALOG,ABS + PC,HB,BK26 | 1 | S.N.A | |
| ..2 | M0090 | BN96-08016A | ASSY SHIELD P-LAMP;LS20TD(MFM),SPTE,T 0. | 1 | S.N.A | |
| ...3 | | BN63-04401A | SHIELD-LAMP;T(22W MFM),SPTE,T 0.3 | 1 | S.N.A | |
| ...3 | M0125 | BN63-04772A | SHIELD-PANEL;LS20TD,SPTE,0.3 | 1 | S.N.A | |
| | | | | | | |
| 0.1 | M0017 | BN91-02524G | ASSY CHASSIS;LS20TDSSU/ZB | 1 | S.N.A | |
| ..2 | M0081 | 6003-000275 | SCREW-TAPTITE;BH,+,-,B,M3,L10,ZPC(BLK),S | 3 | S.N.A | |
| ..2 | M0081 | 6003-000275 | SCREW-TAPTITE;BH,+,-,B,M3,L10,ZPC(BLK),S | 4 | S.N.A | |
| ..2 | M0081 | 6003-001439 | SCREW-TAPTITE;BH,+,-,S,M4,L8,ZPC(WHT),SW | 1 | S.N.A | |
| ..2 | T0562 | 6046-001014 | STAND OFF;#4-40,L6,NI PLT,C3601,- | 4 | S.N.A | |
| ..2 | M0174 | BN44-00177D | IP BOARD;PWI2204ST(A),T 20" MFM,1.4 ~2.8 | 1 | S.A | |
| ..2 | CCMM1 | BN73-00143A | SILICON/RUBBER;CURIE,SILICON+ALUMINA,W13 | 1 | S.N.A | |
| ..2 | CCMM1 | BN73-00192A | SILICON/RUBBER;T-MFM,GAPPAD1500,20X20X8 | 1 | S.N.A | |
| ..2 | M0014 | BN94-01893R | ASSY PCB MAIN;LS20TDSSU/ZB | 1 | S.A | |
| ...3 | T0245 | 0202-001608 | SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0. | 0.025 | S.N.A | |
| ...3 | CN3000 | 3701-001385 | CONNECTOR-DSUB;15P,3R,FEMALE,STRAIGHT,AU | 1 | S.A | |
| ...3 | CN9001 | 3701-001386 | CONNECTOR-DVI;24P,3R,FEMALE,AU | 1 | S.A | |
| ...3 | CN906 | 3707-001081 | CONNECTOR-OPTICAL;STRAIGHT,SPDIF | 1 | S.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|--|------|--------|--------|
| ...3 | CN330 | 3711-006715 | HEADER-BOARD TO CABLE;BOX,4P,1R,2.5mm,AN | 1 | S.N.A | |
| ...3 | JA330 | 3722-002176 | JACK-PHONE;7P/4C,SN,L-BLU,STRAIGHT | 1 | S.A | |
| ...3 | CN3005 | 3722-002275 | JACK-DIN;4P,SN,BLK,ANGLE | 1 | S.A | |
| ...3 | CN2003 | 3722-002680 | JACK-EAR PHONE;6P,NiSn,BLK,ANGLE | 1 | S.A | |
| ...3 | JA333 | 3722-002702 | JACK-PIN;3P,Ni,GRN/BLU/RED,STRAIGHT | 1 | S.A | |
| ...3 | JA333 | 3722-002781 | JACK-PIN;2P(Shield),Ni,WHT/RED,straight | 1 | S.A | |
| ...3 | TUNER_GASK | AA63-01388A | GASKET-EMI,SPONGE;SP-P300M,Conductive Fa | 1 | S.A | |
| ...3 | CIS3 | BN40-00113A | TUNER;HTM-6M/13F2S,HTM-6M/13F2S,PAL M,18 | 1 | S.A | |
| ...3 | T0510 | BN97-02567B | ASSY SMD-MAIN;LS20TDSSU/ZB | 1 | S.N.A | |
|4 | SUB05 | 0202-001477 | SOLDER-CREAM;LST309-M,-,D20~45um,96.5Sn/ | 2.39 | S.N.A | |
|4 | D2006 | 0401-000133 | DIODE-SWITCHING;RLS4148,75V,150mA,LL-34, | 1 | S.A | |
|4 | D2007 | 0401-000133 | DIODE-SWITCHING;RLS4148,75V,150mA,LL-34, | 1 | S.A | |
|4 | D2008 | 0401-000133 | DIODE-SWITCHING;RLS4148,75V,150mA,LL-34, | 1 | S.A | |
|4 | D2009 | 0401-000133 | DIODE-SWITCHING;RLS4148,75V,150mA,LL-34, | 1 | S.A | |
|4 | D2022 | 0401-000133 | DIODE-SWITCHING;RLS4148,75V,150mA,LL-34, | 1 | S.A | |
|4 | D1003 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D2003 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D3003 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D3004 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D3006 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D3007 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D3008 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D3009 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D3010 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D3011 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D3012 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D3013 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D3014 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D3015 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D3016 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D3230 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D4102 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D4109 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D4110 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D4111 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D9301 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D9302 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D9303 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D9304 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D9305 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D9306 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D9307 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D9308 | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 1 | S.A | |
|4 | D2010 | 0401-001099 | DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3 | 1 | S.N.A | |
|4 | D3244 | 0401-001099 | DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3 | 1 | S.N.A | |
|4 | D4112 | 0401-001099 | DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3 | 1 | S.N.A | |
|4 | D4113 | 0401-001099 | DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3 | 1 | S.N.A | |
|4 | D4114 | 0401-001099 | DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3 | 1 | S.N.A | |
|4 | D0254 | 0402-000553 | DIODE-SCHOTTKY;SS24/B240,40V,2000mA,DO-2 | 1 | S.A | |
|4 | D2004 | 0403-000002 | DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD | 1 | S.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|--|------|--------|--------|
|4 | D2023 | 0403-000002 | DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD | 1 | S.A | |
|4 | D3005 | 0403-000002 | DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD | 1 | S.A | |
|4 | D3017 | 0403-000002 | DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD | 1 | S.A | |
|4 | D3018 | 0403-000002 | DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD | 1 | S.A | |
|4 | D3019 | 0403-000002 | DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD | 1 | S.A | |
|4 | D3020 | 0403-000002 | DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD | 1 | S.A | |
|4 | D3021 | 0403-000002 | DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD | 1 | S.A | |
|4 | D5001 | 0403-000002 | DIODE-ZENER;VLZ5V6B,5.45/5.73V,500mW,SOD | 1 | S.A | |
|4 | D3022 | 0403-000258 | DIODE-ZENER;BZX84C5V6,5.2-6V,225mW,SOT-2 | 1 | S.A | |
|4 | D9300 | 0403-000579 | DIODE-ZENER;BZX84C5V1,4.8-5.4V,200mW,SOT | 1 | S.A | |
|4 | D9317 | 0403-000579 | DIODE-ZENER;BZX84C5V1,4.8-5.4V,200mW,SOT | 1 | S.A | |
|4 | D3002 | 0403-000771 | DIODE-ZENER;VLZ6V2B,5.96-6.27V,500mW,SOD | 1 | S.A | |
|4 | D3001 | 0403-001052 | DIODE-ZENER;RD8.2MB,7.7-8.7V,200mW,SOT-2 | 1 | S.A | |
|4 | D3070 | 0403-001052 | DIODE-ZENER;RD8.2MB,7.7-8.7V,200mW,SOT-2 | 1 | S.A | |
|4 | D1002 | 0403-001425 | DIODE-ZENER;BZX84C33,31-35V,350mW,SOT-23 | 1 | S.A | |
|4 | D9329 | 0403-001435 | DIODE-ZENER;QZX363C5V6,5.32-5.88V,200MW, | 1 | S.A | |
|4 | D9340 | 0403-001435 | DIODE-ZENER;QZX363C5V6,5.32-5.88V,200MW, | 1 | S.A | |
|4 | D3029 | 0407-000123 | DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT- | 1 | S.N.A | |
|4 | D3030 | 0407-000123 | DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT- | 1 | S.N.A | |
|4 | Q1001 | 0501-000445 | TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT | 1 | S.A | |
|4 | Q1005 | 0501-000445 | TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT | 1 | S.A | |
|4 | Q2004 | 0501-000445 | TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT | 1 | S.A | |
|4 | Q2005 | 0501-000445 | TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT | 1 | S.A | |
|4 | Q3002 | 0501-000445 | TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT | 1 | S.A | |
|4 | Q3201 | 0501-000445 | TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT | 1 | S.A | |
|4 | Q5005 | 0501-000445 | TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT | 1 | S.A | |
|4 | Q1002 | 0501-002080 | TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59 | 1 | S.A | |
|4 | Q1003 | 0501-002080 | TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59 | 1 | S.A | |
|4 | Q1006 | 0501-002080 | TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59 | 1 | S.A | |
|4 | Q9327 | 0501-002080 | TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59 | 1 | S.A | |
|4 | Q409 | 0505-000110 | FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0. | 1 | S.A | |
|4 | Q409 | 0505-000110 | FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0. | 1 | S.A | |
|4 | Q409 | 0505-000110 | FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0. | 1 | S.A | |
|4 | Q409 | 0505-000110 | FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0. | 1 | S.A | |
|4 | Q409 | 0505-000110 | FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0. | 1 | S.A | |
|4 | Q409 | 0505-001170 | FET-SILICON;SI9933ADY-T1,P,-20V,3.4A,0.0 | 1 | S.A | |
|4 | Q409 | 0505-002169 | FET-SILICON;Si4435BDY-T1-E3,P,-30V,-9.1A | 1 | S.N.A | |
|4 | IC105 | 0909-001032 | IC-REAL TIME CLOCK;PCF8563,SOP,8P,4.9x3. | 1 | S.A | |
|4 | IC106 | 1001-001516 | IC-VIDEO SWITCH;PI3HDMI201ZFE,3HDMI201 : | 1 | S.A | |
|4 | IC112 | 1103-000129 | IC-EEPROM;24C02,2Kbit,256x8Bit,SOP,8P,5x | 1 | S.A | |
|4 | IC112 | 1103-000129 | IC-EEPROM;24C02,2Kbit,256x8Bit,SOP,8P,5x | 1 | S.A | |
|4 | IC112 | 1103-000129 | IC-EEPROM;24C02,2Kbit,256x8Bit,SOP,8P,5x | 1 | S.A | |
|4 | IC112 | 1103-001385 | IC-EEPROM;AT24C256,256Kbit,32Kx8,SOP,8P, | 1 | S.A | |
|4 | IC6001 | 1105-001838 | IC-DDR SDRAM;EM6A9160TS0A-5G,DDR SDRAM,1 | 1 | S.A | |
|4 | DU410 | 1201-000166 | IC-OP AMP;LM358,SOP,ST,8P,150MIL,DUAL,10 | 1 | S.A | |
|4 | T0124 | 1201-002430 | IC-POWER AMP;NTP-3000,QFN,56P,8x8mm,DUAL | 1 | S.A | |
|4 | T0085 | 1201-002487 | IC-AUDIO AMP;MAX9728A,QFN,12P,3x3mm,DUAL | 1 | S.A | |
|4 | T0087 | 1203-001815 | IC-POS.FIXED REG.;78M09,TO-252,3P,-,PLA | 1 | S.A | |
|4 | T0087 | 1203-002842 | IC-POS.FIXED REG.;AP1117D-33A,TO-252,3P | 1 | S.A | |
|4 | T0087 | 1203-002842 | IC-POS.FIXED REG.;AP1117D-33A,TO-252,3P | 1 | S.A | |
|4 | T0087 | 1203-002974 | IC-POS.FIXED REG.;AP1117D-25A,TO-252,3P | 1 | S.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|--|------|--------|--------|
|4 | T0170 | 1203-003059 | IC-SWITCH VOL. REG.;MP1583,SOIC,8P,4.9x3 | 1 | S.A | |
|4 | T0087 | 1203-003696 | IC-POS.FIXED REG.;NCP1117DT18T5G,DPAK,3 | 1 | S.A | |
|4 | IC5001 | 1203-004363 | IC-VOL. DETECTOR;RT9818C-29PV,SOT-23,3P, | 1 | S.A | |
|4 | IC2003 | 1203-004364 | IC-VOL. DETECTOR;RT9818C-42PV,SOT-23,3P, | 1 | S.A | |
|4 | IC1005 | 1203-005188 | IC-DC/DC CONVERTER;AOZ1021AIL,SOP,8P,4.9 | 1 | S.A | |
|4 | D2001 | 1405-001233 | VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP | 1 | S.A | |
|4 | D2002 | 1405-001233 | VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP | 1 | S.A | |
|4 | D3023 | 1405-001233 | VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP | 1 | S.A | |
|4 | D3024 | 1405-001233 | VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP | 1 | S.A | |
|4 | D3071 | 1405-001233 | VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP | 1 | S.A | |
|4 | D3072 | 1405-001233 | VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP | 1 | S.A | |
|4 | D3231 | 1405-001233 | VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP | 1 | S.A | |
|4 | D3232 | 1405-001233 | VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP | 1 | S.A | |
|4 | D3233 | 1405-001233 | VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP | 1 | S.A | |
|4 | D4115 | 1405-001233 | VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP | 1 | S.A | |
|4 | D4117 | 1405-001233 | VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP | 1 | S.A | |
|4 | R1028 | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1067 | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1068 | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1071 | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R6101 | 2007-000052 | R-CHIP;10Kohm,1%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1029 | 2007-000067 | R-CHIP;15Kohm,1%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1002 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1004 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1063 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1064 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1301 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R2013 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R2066 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3001 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3002 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3003 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3004 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3005 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3006 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3007 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3008 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3010 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3066 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3259 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3260 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3261 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3264_H | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3265_H | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R4058 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R4101 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5001 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5028 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5036 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5037 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5052 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|--------------------------------|------|--------|--------|
|4 | R5057 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5065 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5999 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R6012 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R6014 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R6066_T | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R6094 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9348_F3V | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9356 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9357 | 2007-000070 | R-CHIP;0ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3014 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3015 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3027 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3103 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5019 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5020 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5021 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5024 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5027 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5029 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5083 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5084 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5203 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5204 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5205 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9318 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9319 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9320 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9321 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9322 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9323 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9324 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9325 | 2007-000071 | R-CHIP;22ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3016 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3017 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3025 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3026 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5032 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5033 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5035 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R6010 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R6011 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R6050 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R6051 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9336 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9337 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R2014 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2017 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3013 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3030 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3064 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|---------------------------------|------|--------|--------|
|4 | R3065 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R4127 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5009 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5010 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5011 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5017 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5018 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5038 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5039 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5040 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5042 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5043 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5051 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5054 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5055 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5058 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5059 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5060 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5061 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5063 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5067 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5068 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5072 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5073 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R6015 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R6016 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R6020 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R6093 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R9330 | 2007-000074 | R-CHIP;100ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1010 | 2007-000076 | R-CHIP;330ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2084 | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2085 | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5041 | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5085 | 2007-000077 | R-CHIP;470ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2015 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2021 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2125 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2126 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3009 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3028 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3029 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5002 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R6048 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R6049 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R6052 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R6092 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R9326 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R9328 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R9352 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R9353 | 2007-000078 | R-CHIP;1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3036 | 2007-000081 | R-CHIP;2.7Kohm,5%,1/10W,TP,1608 | 1 | S.N.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|---------------------------------|------|--------|--------|
|4 | R5070 | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5071 | 2007-000082 | R-CHIP;3.3Kohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1031 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1032 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2004 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2005 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2009 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2010 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2069 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2081 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2083 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2088 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3012 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3044 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3062 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3063 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3254 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5069 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R6041 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R6042 | 2007-000084 | R-CHIP;4.7Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1006 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1007 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1030 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1043 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1048 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1049 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2028 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2080 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2082 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2089 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2156 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2157 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3018 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3019 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3023 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3024 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3031 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3034 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3035 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3042 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3057 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3058 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3059 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3253 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R4119 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R4120 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5004 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5007 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5077 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5080 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5117 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|---------------------------------|------|--------|--------|
|4 | R5119 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R9331 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R9334 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R9335 | 2007-000090 | R-CHIP;10Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R4121 | 2007-000091 | R-CHIP;12Kohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R4123 | 2007-000091 | R-CHIP;12Kohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9358 | 2007-000091 | R-CHIP;12Kohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R9359 | 2007-000091 | R-CHIP;12Kohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1012 | 2007-000094 | R-CHIP;22Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5074 | 2007-000094 | R-CHIP;22Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5076 | 2007-000094 | R-CHIP;22Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5078 | 2007-000094 | R-CHIP;22Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5081 | 2007-000094 | R-CHIP;22Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1015 | 2007-000097 | R-CHIP;47Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1016 | 2007-000097 | R-CHIP;47Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1008 | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1011 | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1040 | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1041 | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1042 | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1058 | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R6022 | 2007-000102 | R-CHIP;100Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R6090 | 2007-000106 | R-CHIP;220Kohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5082 | 2007-000109 | R-CHIP;1Mohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R2074 | 2007-000119 | R-CHIP;560ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5006 | 2007-000124 | R-CHIP;2.2Kohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5506 | 2007-000124 | R-CHIP;2.2Kohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R5075 | 2007-000127 | R-CHIP;9.1Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2019 | 2007-000138 | R-CHIP;100ohm,5%,1/16W,TP,1005 | 1 | S.N.A | |
|4 | R3074 | 2007-000138 | R-CHIP;100ohm,5%,1/16W,TP,1005 | 1 | S.N.A | |
|4 | R3283 | 2007-000138 | R-CHIP;100ohm,5%,1/16W,TP,1005 | 1 | S.N.A | |
|4 | R2077 | 2007-000140 | R-CHIP;1Kohm,5%,1/16W,TP,1005 | 1 | S.N.A | |
|4 | R2078 | 2007-000140 | R-CHIP;1Kohm,5%,1/16W,TP,1005 | 1 | S.N.A | |
|4 | R3284 | 2007-000148 | R-CHIP;10Kohm,5%,1/16W,TP,1005 | 1 | S.N.A | |
|4 | R3285 | 2007-000148 | R-CHIP;10Kohm,5%,1/16W,TP,1005 | 1 | S.N.A | |
|4 | R2075 | 2007-000174 | R-CHIP;47ohm,5%,1/16W,TP,1005 | 1 | S.N.A | |
|4 | R2076 | 2007-000174 | R-CHIP;47ohm,5%,1/16W,TP,1005 | 1 | S.N.A | |
|4 | R3011 | 2007-000309 | R-CHIP;10ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2086 | 2007-000570 | R-CHIP;220ohm,1%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2087 | 2007-000570 | R-CHIP;220ohm,1%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2016 | 2007-000683 | R-CHIP;3.3Kohm,1%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1070 | 2007-000726 | R-CHIP;300ohm,1%,1/10W,TP,1608 | 1 | S.A | |
|4 | R1057 | 2007-000839 | R-CHIP;39ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2001 | 2007-000882 | R-CHIP;4.7ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R2002 | 2007-000882 | R-CHIP;4.7ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R2003 | 2007-000882 | R-CHIP;4.7ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R2006 | 2007-000882 | R-CHIP;4.7ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R2007 | 2007-000882 | R-CHIP;4.7ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R2008 | 2007-000882 | R-CHIP;4.7ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R2011 | 2007-000882 | R-CHIP;4.7ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R2012 | 2007-000882 | R-CHIP;4.7ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|--|------|--------|--------|
|4 | R1033 | 2007-000939 | R-CHIP;47Kohm,1%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3070 | 2007-000950 | R-CHIP;47ohm,5%,1/4W,TP,3216 | 1 | S.A | |
|4 | R3071 | 2007-000950 | R-CHIP;47ohm,5%,1/4W,TP,3216 | 1 | S.A | |
|4 | R3286 | 2007-000950 | R-CHIP;47ohm,5%,1/4W,TP,3216 | 1 | S.A | |
|4 | R1069 | 2007-000965 | R-CHIP;5.1Kohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R6017 | 2007-001007 | R-CHIP;51Kohm,1%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2020 | 2007-001093 | R-CHIP;620ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R4103 | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R4105 | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R4107 | 2007-001164 | R-CHIP;75ohm,1%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3020 | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3021 | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3022 | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3072 | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3073 | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3287 | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R6027 | 2007-001167 | R-CHIP;75ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1003 | 2007-002425 | R-CHIP;1ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1022 | 2007-002425 | R-CHIP;1ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1023 | 2007-002425 | R-CHIP;1ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1025 | 2007-002425 | R-CHIP;1ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1026 | 2007-002425 | R-CHIP;1ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1027 | 2007-002425 | R-CHIP;1ohm,5%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R3288 | 2007-007309 | R-CHIP;12Kohm,1%,1/16W,TP,1005 | 1 | S.A | |
|4 | R3289 | 2007-007309 | R-CHIP;12Kohm,1%,1/16W,TP,1005 | 1 | S.A | |
|4 | R6006 | 2011-000585 | R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3. | 1 | S.N.A | |
|4 | R6007 | 2011-000585 | R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3. | 1 | S.N.A | |
|4 | RA5008 | 2011-000585 | R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3. | 1 | S.N.A | |
|4 | RA5009 | 2011-000585 | R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3. | 1 | S.N.A | |
|4 | RA5010 | 2011-000585 | R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3. | 1 | S.N.A | |
|4 | RA5011 | 2011-000585 | R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3. | 1 | S.N.A | |
|4 | RA5012 | 2011-000585 | R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3. | 1 | S.N.A | |
|4 | RA6006 | 2011-000585 | R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3. | 1 | S.N.A | |
|4 | RA6009 | 2011-000585 | R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,3. | 1 | S.N.A | |
|4 | RA5024 | 2011-000881 | R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,3. | 1 | S.N.A | |
|4 | RA5026 | 2011-000881 | R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,3. | 1 | S.N.A | |
|4 | RA5027 | 2011-000881 | R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,3. | 1 | S.N.A | |
|4 | RA6010 | 2011-000881 | R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,3. | 1 | S.N.A | |
|4 | RA5007 | 2011-001001 | R-NETWORK;0ohm,5%,1/16W,L,CHIP,8P,TP,3.2 | 1 | S.A | |
|4 | RA5001 | 2011-001011 | R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | RA5004 | 2011-001011 | R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | RA5017 | 2011-001011 | R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | RA5018 | 2011-001011 | R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | RA5032 | 2011-001011 | R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | RA5033 | 2011-001011 | R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | RA5005 | 2011-001093 | R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | RA5006 | 2011-001093 | R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | RA5015 | 2011-001093 | R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | RA5019 | 2011-001093 | R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | RA5020 | 2011-001093 | R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | RA5021 | 2011-001093 | R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|--|------|--------|--------|
|4 | RA5023 | 2011-001093 | R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | RA5028 | 2011-001093 | R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | RA5029 | 2011-001093 | R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | RA5030 | 2011-001093 | R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,3 | 1 | S.A | |
|4 | C1005 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C1047 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C1060 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C1071 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C1112 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C1120 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C2004 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C2005 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C2013 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C2014 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C2015 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C2036 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C2037 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C2043 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C2082 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C3002 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C3020 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C3251 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5002 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5003 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5004 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5005 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5006 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5007 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5008 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5011 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5016 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5018 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5019 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5021 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5022 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5023 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5024 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5026 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5027 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5029 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5032 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5033 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5035 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5036 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5037 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5042 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5044 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5048 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5049 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5050 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5051 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|---------------------------------------|------|--------|--------|
|4 | C5053 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5069 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5071 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5072 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5073 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5074 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5075 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5076 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5081 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5089 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5098 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5111 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5112 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5115 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5200 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C5208 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C6016 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C6024 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C6025 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C6026 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C6027 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C6029 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C6031 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C6032 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C6033 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C6034 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C6100 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C9309 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C9310 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C9311 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C9312 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C9313 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C9314 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C9315 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C9316 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C9338 | 2203-000189 | C-CER,CHIP;100nF,+80-20%,25V,Y5V,1608 | 1 | S.N.A | |
|4 | C3236 | 2203-000233 | C-CER,CHIP;0.1nF,5%,50V,C0G,1005 | 1 | S.A | |
|4 | C2012 | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608 | 1 | S.N.A | |
|4 | C2019 | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608 | 1 | S.N.A | |
|4 | C3104 | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608 | 1 | S.N.A | |
|4 | C3105 | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608 | 1 | S.N.A | |
|4 | C4116 | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608 | 1 | S.N.A | |
|4 | C4118 | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608 | 1 | S.N.A | |
|4 | C6050 | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608 | 1 | S.N.A | |
|4 | C6051 | 2203-000236 | C-CER,CHIP;0.1nF,5%,50V,C0G,1608 | 1 | S.N.A | |
|4 | C1012 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,TP,1608 | 1 | S.A | |
|4 | C1019 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,TP,1608 | 1 | S.A | |
|4 | C1020 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,TP,1608 | 1 | S.A | |
|4 | C1037 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,TP,1608 | 1 | S.A | |
|4 | C1061 | 2203-000257 | C-CER,CHIP;10nF,10%,50V,X7R,TP,1608 | 1 | S.A | |
|4 | C1058 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|---------------------------------------|------|--------|--------|
|4 | C2001 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C2002 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C2018 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C2025 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C2026 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C2027 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C2028 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C2034 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C2035 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C2039 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C2040 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C2041 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C2079 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C3253 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C5039 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C5055 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C5099 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C6015 | 2203-000440 | C-CER,CHIP;1nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C1017 | 2203-000491 | C-CER,CHIP;2.2nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C5091 | 2203-000491 | C-CER,CHIP;2.2nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C5094 | 2203-000491 | C-CER,CHIP;2.2nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C5100 | 2203-000491 | C-CER,CHIP;2.2nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C5101 | 2203-000491 | C-CER,CHIP;2.2nF,10%,50V,X7R,1608 | 1 | S.A | |
|4 | C3106 | 2203-000626 | C-CER,CHIP;0.022nF,5%,50V,C0G,1608 | 1 | S.N.A | |
|4 | C5014 | 2203-000626 | C-CER,CHIP;0.022nF,5%,50V,C0G,1608 | 1 | S.N.A | |
|4 | C5015 | 2203-000626 | C-CER,CHIP;0.022nF,5%,50V,C0G,1608 | 1 | S.N.A | |
|4 | C3007 | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608 | 1 | S.A | |
|4 | C3008 | 2203-000783 | C-CER,CHIP;0.33nF,5%,50V,C0G,1608 | 1 | S.A | |
|4 | C2081 | 2203-000815 | C-CER,CHIP;0.033nF,5%,50V,C0G,1608 | 1 | S.A | |
|4 | C2083 | 2203-000815 | C-CER,CHIP;0.033nF,5%,50V,C0G,1608 | 1 | S.A | |
|4 | C4104 | 2203-000815 | C-CER,CHIP;0.033nF,5%,50V,C0G,1608 | 1 | S.A | |
|4 | C4106 | 2203-000815 | C-CER,CHIP;0.033nF,5%,50V,C0G,1608 | 1 | S.A | |
|4 | C4108 | 2203-000815 | C-CER,CHIP;0.033nF,5%,50V,C0G,1608 | 1 | S.A | |
|4 | C1018 | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608 | 1 | S.A | |
|4 | C1056 | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608 | 1 | S.A | |
|4 | C5038 | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608 | 1 | S.A | |
|4 | C5040 | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608 | 1 | S.A | |
|4 | C5041 | 2203-000888 | C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1608 | 1 | S.A | |
|4 | C2033 | 2203-000925 | C-CER,CHIP;470nF,+80-20%,50V,Y5V,2012 | 1 | S.A | |
|4 | C2080 | 2203-000925 | C-CER,CHIP;470nF,+80-20%,50V,Y5V,2012 | 1 | S.A | |
|4 | C5056 | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,- | 1 | S.N.A | |
|4 | C5057 | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,- | 1 | S.N.A | |
|4 | C5060 | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,- | 1 | S.N.A | |
|4 | C5061 | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,- | 1 | S.N.A | |
|4 | C5062 | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,- | 1 | S.N.A | |
|4 | C5063 | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,- | 1 | S.N.A | |
|4 | C5065 | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,- | 1 | S.N.A | |
|4 | C5066 | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,- | 1 | S.N.A | |
|4 | C5067 | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,- | 1 | S.N.A | |
|4 | C5113 | 2203-000975 | C-CER,CHIP;47nF,10%,25V,X7R,TP,1608,- | 1 | S.N.A | |
|4 | C1016 | 2203-000979 | C-CER,CHIP;47nF,10%,50V,X7R,TP,2012 | 1 | S.N.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|--|------|--------|--------|
|4 | C6014 | 2203-000998 | C-CER,CHIP;0.047nF,5%,50V,C0G,1608 | 1 | S.N.A | |
|4 | C3009 | 2203-001052 | C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C3010 | 2203-001052 | C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C4122 | 2203-001052 | C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C4124 | 2203-001052 | C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C1011 | 2203-001607 | C-CER,CHIP;0.22nF,5%,50V,NP0,1608 | 1 | S.A | |
|4 | C5000 | 2203-001630 | C-CER,CHIP;330nF,+80-20%,16V,Y5V,1608 | 1 | S.N.A | |
|4 | C1063 | 2203-002398 | C-CER,CHIP;22nF,10%,50V,X7R,1608 | 1 | S.N.A | |
|4 | C2006 | 2203-002398 | C-CER,CHIP;22nF,10%,50V,X7R,1608 | 1 | S.N.A | |
|4 | C2008 | 2203-002398 | C-CER,CHIP;22nF,10%,50V,X7R,1608 | 1 | S.N.A | |
|4 | C2010 | 2203-002398 | C-CER,CHIP;22nF,10%,50V,X7R,1608 | 1 | S.N.A | |
|4 | C2024 | 2203-002398 | C-CER,CHIP;22nF,10%,50V,X7R,1608 | 1 | S.N.A | |
|4 | C3239 | 2203-002525 | C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005 | 1 | S.N.A | |
|4 | C3240 | 2203-002525 | C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005 | 1 | S.N.A | |
|4 | C2090 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C2091_22 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C2160 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C4009 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C5090 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C6006 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C6019 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C6021 | 2203-005005 | C-CER,CHIP;100nF,10%,16V,X7R,1608 | 1 | S.A | |
|4 | C1001_22 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C1022 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C1107 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C1114 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C2007 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C2009 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C2011 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C2023 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C2158 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C2159 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C5087 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C9346 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C9347 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C9354 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C9355 | 2203-005065 | C-CER,CHIP;1000nF,+80-20%,10V,Y5V,1608 | 1 | S.N.A | |
|4 | C1002 | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C1064 | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C2029 | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C2030 | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C2031 | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C2032 | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C2075 | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C2076 | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C2077 | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C2078 | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C1073 | 2203-005384 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,TP,201 | 1 | S.N.A | |
|4 | C1103 | 2203-005384 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,TP,201 | 1 | S.N.A | |
|4 | C1123 | 2203-005384 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,TP,201 | 1 | S.N.A | |
|4 | C1124 | 2203-005384 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,TP,201 | 1 | S.N.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|--|------|--------|--------|
|4 | C5077 | 2203-005384 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,TP,201 | 1 | S.N.A | |
|4 | C5078 | 2203-005384 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,TP,201 | 1 | S.N.A | |
|4 | C5079 | 2203-005384 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,TP,201 | 1 | S.N.A | |
|4 | C5080 | 2203-005384 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,TP,201 | 1 | S.N.A | |
|4 | C5084 | 2203-005384 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,TP,201 | 1 | S.N.A | |
|4 | C5085 | 2203-005384 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,TP,201 | 1 | S.N.A | |
|4 | C5086 | 2203-005384 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,TP,201 | 1 | S.N.A | |
|4 | C2154 | 2203-005533 | C-CER,CHIP;1000nF,20%,6.3V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C2155 | 2203-005533 | C-CER,CHIP;1000nF,20%,6.3V,X7R,TP,1608 | 1 | S.N.A | |
|4 | C2044 | 2203-005809 | C-CER,CHIP;1000nF,10%,16V,X7R,-,2012 | 1 | S.A | |
|4 | C5047 | 2203-005809 | C-CER,CHIP;1000nF,10%,16V,X7R,-,2012 | 1 | S.A | |
|4 | C5207 | 2203-005809 | C-CER,CHIP;1000nF,10%,16V,X7R,-,2012 | 1 | S.A | |
|4 | C1052 | 2203-005834 | C-CER,CHIP;22000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C1053 | 2203-005834 | C-CER,CHIP;22000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C1065 | 2203-005834 | C-CER,CHIP;22000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C1066 | 2203-005834 | C-CER,CHIP;22000nF,+80-20%,10V,Y5V,3216 | 1 | S.A | |
|4 | C2020 | 2203-006158 | C-CER,CHIP;100nF,10%,16V,X7R,1005 | 1 | S.N.A | |
|4 | C2021 | 2203-006158 | C-CER,CHIP;100nF,10%,16V,X7R,1005 | 1 | S.N.A | |
|4 | C1003 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C1007 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C1010 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C1014 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C1035 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C1036 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C1038 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C1039 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C1046 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C1048 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C1050 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C1051 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C1059 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C1068 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C2092 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 1 | S.A | |
|4 | C1075 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C1104 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C1109 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C1110 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C2016 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C2017 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C2042 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C2161 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C3001 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C3019 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C3250 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C4010 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C5013 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C5088 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C9337 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 1 | S.A | |
|4 | C1055 | 2203-006708 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,1608 | 1 | S.A | |
|4 | C1057 | 2203-006708 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,1608 | 1 | S.A | |
|4 | C1121 | 2203-006708 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,1608 | 1 | S.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|--|------|--------|--------|
|4 | C1122 | 2203-006708 | C-CER,CHIP;4700nF,+80-20%,10V,Y5V,1608 | 1 | S.A | |
|4 | C1004 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C1006 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C1008 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C1009 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C1013 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C1015 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C1049 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C5201 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C5202 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C5203 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C5204 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C5205 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C6003 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C6028 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C6049 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C6075 | 2203-007176 | C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012 (| 1 | S.N.A | |
|4 | C6001 | 2402-001216 | C-AL,SMD;470uF,20%,16V,WT,TP,10.3x10.3x1 | 1 | S.A | |
|4 | C1021 | 2402-001238 | C-AL,SMD;1uF,20%,50V,HR,TP,4.3x4.3x5.2mm | 1 | S.N.A | |
|4 | C2003 | 2402-001273 | C-AL,SMD;220uF,20%,35V,WT,REEL,10X10mm | 1 | S.A | |
|4 | T0052 | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225 | 1 | S.A | |
|4 | T0052 | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225 | 1 | S.A | |
|4 | T0052 | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225 | 1 | S.A | |
|4 | T0052 | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225 | 1 | S.A | |
|4 | T0052 | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225 | 1 | S.A | |
|4 | T0052 | 2703-000417 | INDUCTOR-SMD;220uH,5%,3225 | 1 | S.A | |
|4 | T0052 | 2703-001334 | INDUCTOR-SMD;1.5uH,10%,2012 | 1 | S.A | |
|4 | T0052 | 2703-001426 | INDUCTOR-SMD;680uH,20%,7070 | 1 | S.A | |
|4 | T0052 | 2703-001778 | INDUCTOR-SMD;3.3uH,20%,3225 | 1 | S.A | |
|4 | T0052 | 2703-002722 | INDUCTOR-SMD;22uH,20%,12x12mm | 1 | S.A | |
|4 | T0052 | 2703-002916 | INDUCTOR-SMD;10uH,20%,8080 | 1 | S.A | |
|4 | T0052 | 2703-003362 | INDUCTOR-SMD;4.7uH,20%,7070 | 1 | S.A | |
|4 | L2001 | 2704-000018 | INDUCTOR-SMD-ARRAY;15uH,2000mA,2,0.124oh | 1 | S.N.A | |
|4 | L2002 | 2704-000018 | INDUCTOR-SMD-ARRAY;15uH,2000mA,2,0.124oh | 1 | S.N.A | |
|4 | X202 | 2801-003667 | CRYSTAL-SMD;14.31818MHz,30ppm,28-AAN,16p | 1 | S.A | |
|4 | F103 | 2901-001114 | FILTER-EMI SMD;25VDC,2.0ADC,-,100nF,3.2x | 1 | S.A | |
|4 | T0568 | 3301-001145 | BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm | 1 | S.N.A | |
|4 | T0568 | 3301-001145 | BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm | 1 | S.N.A | |
|4 | T0568 | 3301-001145 | BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm | 1 | S.N.A | |
|4 | T0568 | 3301-001145 | BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm | 1 | S.N.A | |
|4 | T0568 | 3301-001145 | BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm | 1 | S.N.A | |
|4 | T0568 | 3301-001145 | BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm | 1 | S.N.A | |
|4 | T0568 | 3301-001145 | BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm | 1 | S.N.A | |
|4 | T0568 | 3301-001145 | BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm | 1 | S.N.A | |
|4 | T0568 | 3301-001145 | BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm | 1 | S.N.A | |
|4 | T0568 | 3301-001145 | BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm | 1 | S.N.A | |
|4 | T0568 | 3301-001145 | BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm | 1 | S.N.A | |
|4 | T0568 | 3301-001145 | BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm | 1 | S.N.A | |
|4 | T0568 | 3301-001145 | BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm | 1 | S.N.A | |
|4 | T0568 | 3301-001145 | BEAD-SMD;60ohm,4516,TP,70ohm/45MHz,82ohm | 1 | S.N.A | |
|4 | T0568 | 3301-001324 | BEAD-SMD;15ohm,2012,600mA,TP,,0.1ohm | 1 | S.A | |

5. Exploded View & Part List

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|---|------|--------|--------|
|4 | T0568 | 3301-001404 | BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz | 1 | S.A | |
|4 | T0568 | 3301-001404 | BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz | 1 | S.A | |
|4 | T0568 | 3301-001404 | BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz | 1 | S.A | |
|4 | T0568 | 3301-001404 | BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz | 1 | S.A | |
|4 | T0568 | 3301-001404 | BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz | 1 | S.A | |
|4 | T0568 | 3301-001404 | BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz | 1 | S.A | |
|4 | T0568 | 3301-001404 | BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz | 1 | S.A | |
|4 | T0568 | 3301-001404 | BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz | 1 | S.A | |
|4 | T0568 | 3301-001404 | BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz | 1 | S.A | |
|4 | T0568 | 3301-001404 | BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz | 1 | S.A | |
|4 | T0568 | 3301-001404 | BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz | 1 | S.A | |
|4 | T0568 | 3301-001404 | BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz | 1 | S.A | |
|4 | T0568 | 3301-001404 | BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz | 1 | S.A | |
|4 | T0568 | 3301-001404 | BEAD-SMD;30ohm,2012,TP,15.9OHM/30MHz | 1 | S.A | |
|4 | T0568 | 3301-001793 | BEAD-SMD;18ohm,1608,-,TP,11.8ohm/37.6MHz | 1 | S.A | |
|4 | T0568 | 3301-001793 | BEAD-SMD;18ohm,1608,-,TP,11.8ohm/37.6MHz | 1 | S.A | |
|4 | T0568 | 3301-001793 | BEAD-SMD;18ohm,1608,-,TP,11.8ohm/37.6MHz | 1 | S.A | |
|4 | CN3001 | 3701-001367 | CONNECTOR-HDMI;19P,2R,FEMALE,SMD,AU | 1 | S.A | |
|4 | M0106 | 3708-001150 | CONNECTOR-FPC/FFC/PIC;30P,1mm,SMD-A,SN,Y | 1 | S.A | |
|4 | CN330 | 3711-005499 | HEADER-BOARD TO CABLE;BOX,8P,1R,1.25mm,S | 1 | S.N.A | |
|4 | CN330 | 3711-005503 | HEADER-BOARD TO CABLE;BOX,9P,1R,2mm,SMD- | 1 | S.N.A | |
|4 | T0077 | BN41-01068B | PCB MAIN;T-MFM,FR-4,230*180,22 sound_imp | 1 | S.N.A | |
|4 | MAIN_MICOM | BN97-02752A | ASSY MICOM-MAIN;LS20TDSSU/ZB | 1 | S.N.A | |
|5 | IC115 | 1107-001709 | IC-FLASH MEMORY;MX25L1605A,16Mbit,2Mx8,S | 1 | S.N.A | |
|4 | T0087 | 1203-003060 | IC-POSIX.FIXED REG.;AP1084,TO-263,3P,9.97 | 1 | S.A | |
|4 | IC109 | 1205-003308 | IC-LCD CONTROLLER;SEMP690-LF,LQFP,256P,2 | 1 | S.A | |
|4 | R2162 | 2007-000131 | R-CHIP;91Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R2163 | 2007-000131 | R-CHIP;91Kohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R3251 | 2007-000239 | R-CHIP;1.5Kohm,1%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R1021 | 2007-000503 | R-CHIP;2.2ohm,5%,1/10W,TP,1608 | 1 | S.A | |
|4 | R5034 | 2007-000821 | R-CHIP;390ohm,1%,1/10W,TP,1608 | 1 | S.N.A | |
|4 | R6013 | 2007-007651 | R-CHIP;9.1Kohm,1%,1/10W,TP,1608 | 1 | S.A | |
|4 | C9345 | 2203-001071 | C-CER,CHIP;0.056nF,5%,50V,C0G,TP,1608 | 1 | S.N.A | |
|4 | X202 | 2801-000258 | CRYSTAL-SMD;0.032768MHz,20ppm,SMD,12.5pF | 1 | S.N.A | |
| ...3 | T0066 | BP62-00047A | HEAT SINK-ES;DLP,A6063S,T2.5,13,13,TAPE | 1 | S.N.A | |
| ...3 | JA333 | 3722-002267 | JACK-PIN;3P,AU,RED/WHT/YEL,ANGLE | 1 | S.A | |
| ...3 | T0066 | BP62-00017A | HEAT SINK-ES;SP-50L2HX,A6063S,T2.0,26.2, | 1 | S.N.A | |
| ..2 | M0214 | BN96-07252B | ASSY CABLE P-FLAT;LIME,Flat cable,100mm, | 1 | S.A | |
| ..2 | M0006 | BN96-08149G | ASSY SHIELD P-COVER;LS20TD(ANALOG),SECC | 1 | S.N.A | |
| ...3 | T0073 | BH63-00008A | GASKET-EMI;IB10LO,CONDUCTIVE FABRIC,3MM, | 1 | S.N.A | |
| ...3 | M0131 | BH63-00104A | GASKET;POSEIDON,CONDUCTIVE FABRIC,2MM,10 | 4 | S.N.A | |
| ...3 | | BN61-02429F | STUD-PEM;PNB,M2.8,D7,L28,ZPC(SIL),SUM24L | 1 | S.N.A | |
| ...3 | M0114 | BN61-02500A | HOLDER-WIRE;NYLON6.6,NATURAL | 1 | S.N.A | |
| ...3 | | BN61-03869A | SPRING ETC-STAND;LS22AQ,SUS 304,T0.3,SIM | 1 | S.N.A | |
| ...3 | | BN61-03936A | BRACKET-STAND FRAME;LS20TD,SECC,T 1.6 | 1 | S.N.A | |
| ...3 | M0107 | BN63-04406H | SHIELD-COVER;T200M ANALOG,SECC,T 0.8 | 1 | S.N.A | |
| ...3 | | BN61-02429D | STUD-PEM;PNB,M2.8,D7,L20,ZPC(SIL),SUM24L | 2 | S.N.A | |
| ..2 | | BN73-00024C | SILICON/RUBBER-BERGQUIST;VENUS 32,40",SI | 1 | S.N.A | |
| | | | | | | |

5. Exploded View & Part List

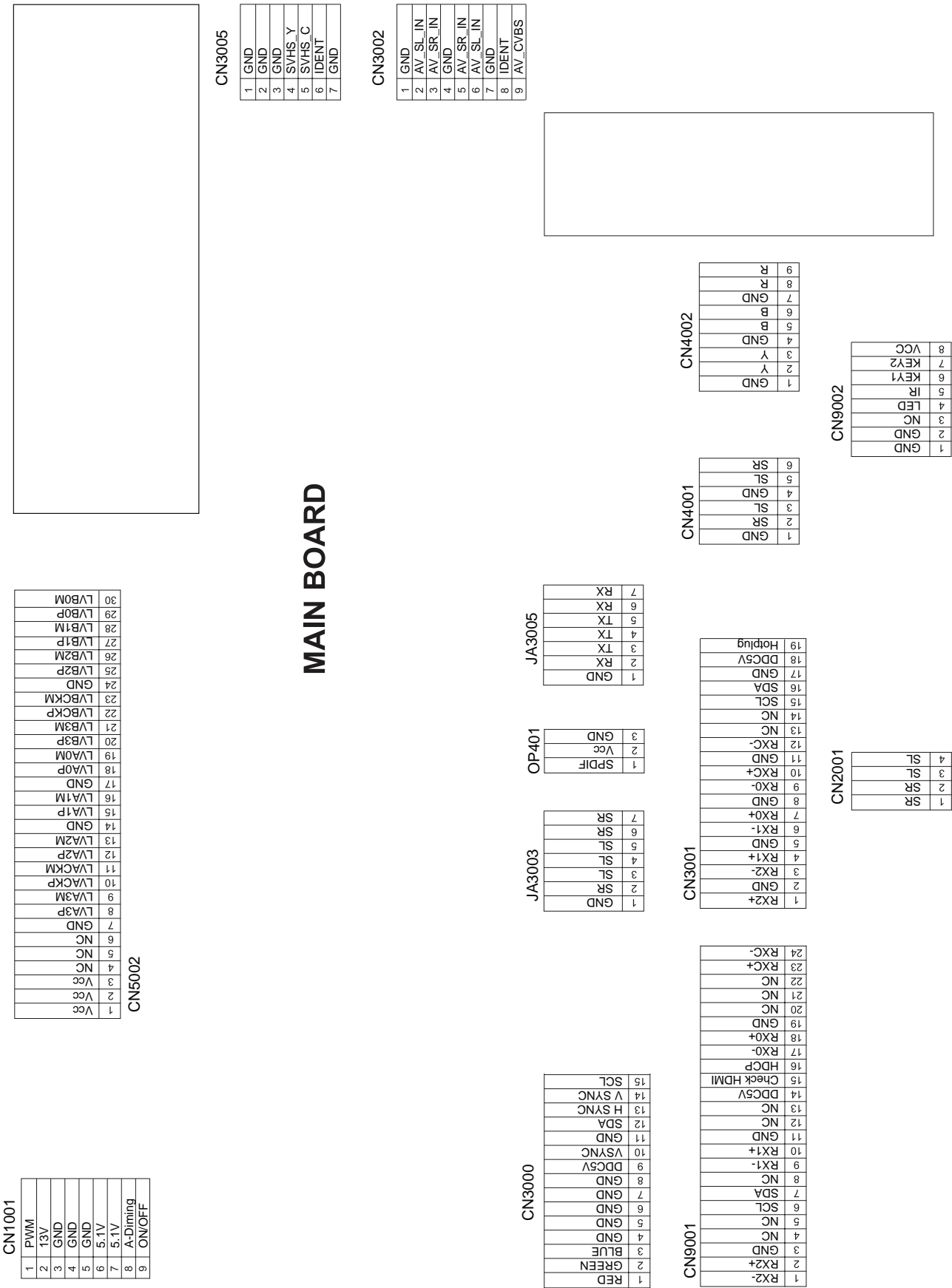
| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|--------|--------------|-------------|--|------|--------|--------|
| 0.1 | M0019 | BN92-03362A | ASSY LABEL;LS22TWH SUV/EN | 1 | S.N.A | |
| | | | | | | |
| 0.1 | M0113 | BN92-03420B | ASSY P/MATERIAL;LS20TDNSUV/ZA | 1 | S.N.A | |
| ..2 | T0524 | 6902-000241 | BAG PE;HDPE/NITRON,T0.5/T0.012,W600,L600 | 1 | S.N.A | |
| | | | | | | |
| 0.1 | | BN92-04035B | ASSY ACCESSORY-STZ;LS22TDSSUMZD | 1 | S.N.A | |
| ..2 | M0114 | BN39-00244G | CBF SIGNAL;D-sub cable,15P/15P,20276N,15 | 1 | S.A | |
| ..2 | M0027 | BN96-07345B | ASSY STAND P-BASE;LS22TW,ABS HB PMMA,RD0 | 1 | S.A | |
| ...3 | M0081 | 6003-000115 | SCREW-TAPTITE;BH,+,B,M3,L6,ZPC(BLK),SWRC | 4 | S.N.A | |
| ...3 | CIS4 | BN61-01717A | HOLDER-STAND;BIZET,NI PLT,CH,+,M4,L11(5) | 1 | S.N.A | |
| ...3 | | BN61-03907A | BRACKET-STAND BOTTOM;T22W,SECC,T 0.8 | 1 | S.N.A | |
| ...3 | T0004 | BN63-04390A | COVER-STAND BASE;T220,PMMA+ABS,HB,RD02,H | 1 | S.N.A | |
| ...3 | CCM1 | BN63-02183K | COVER-SHEET;Rhcm,PE Vinyl,T 0.05,250MM,2 | 0.3 | S.N.A | |
| ...3 | T0132 | BN73-00077A | RUBBER FOOT;MATISSE,BUMPON,φ13.5,T2.0,6 | 4 | S.N.A | |
| ..2 | STD | BN96-07347D | ASSY STAND P-BODY;LS22TD,PMMA ABS HB, SM | 1 | S.A | |
| ...3 | M0081 | 6003-000275 | SCREW-TAPTITE;BH,+,B,M3,L10,ZPC(BLK),S | 5 | S.N.A | |
| ...3 | | BN63-04404A | COVER-STAND FRONT;T200D / T220D,PMMA+ABS | 1 | S.N.A | |
| ...3 | | BN63-04407A | COVER-STAND REAR;T200D , T220D,PMMA+ABS, | 1 | S.N.A | |
| ...3 | T0054 | BN96-07341B | ASSY HINGE P;LS22TW,SM50 T2.0 | 1 | S.N.A | |
| ...3 | CCM1 | BN63-02183K | COVER-SHEET;Rhcm,PE Vinyl,T 0.05,250MM,2 | 0.25 | S.N.A | |
| ..2 | | BN96-09196A | ASSY ACCESSORY-STZ;LS22TDSSUMZD | 1 | S.A | |
| ...3 | T0524 | 6902-000110 | BAG PE;LDPE,T0.05,W250,L400,TRP,28,2,-,9 | 1 | S.N.A | |
| ...3 | T0128 | BN39-00061C | CBF SIGNAL-STEREO;Mckinley,1,male,1.5m,B | 1 | S.A | |
| ...3 | | BN59-00804A | S/W DRIVER-01,IB;T200M,T220M,S.America,S | 1 | S.N.A | |
| ...3 | M9889 | BN63-01798B | CLOTH-CLEAN;cloth,180,200,sea blue,ToC | 1 | S.N.A | |
| ...3 | | BN68-00844A | MANUAL FLYER-01, LEAFLET;LCD/CDT Leaflet | 1 | S.N.A | |
| ...3 | T0268 | 3903-000020 | CBF-POWER CORD;DT,BR,BP3/YES,I(IEC320 C1 | 1 | S.A | |
| ...3 | M0114 | BN61-03555A | HOLDER-WIRE;MCKINLEY,ABS HB,BK26 | 1 | S.N.A | |
| ...3 | | BN98-01071A | ASSY K/D-REMOCON;BN59-00678A,CORAL,BRAZI | 1 | S.N.A | |
|4 | M0014 | BN94-01943A | ASSY PCB MAIN;BN98-01071A | 1 | S.N.A | |
|5 | | AA83-00266A | CKD-HOLDER WIRE;URETHAN CLARITY | 1 | S.N.A | |
|5 | | AA83-00321A | CKD-RUBBER-KEY PAD;BN59-00678A | 1 | S.N.A | |
|5 | | AA83-00322A | CKD-B/SPRING COMMON;BN59-00678A | 1 | S.N.A | |
|5 | | AA83-00325A | CKD-BAG-PE;BN59-00678A | 1 | S.N.A | |
|5 | T0174 | BN97-02333A | ASSY SMD;BN98-01071A | 1 | S.N.A | |
|6 | | AA83-00256A | CKD-IR-LED;Φ5.0 | 1 | S.N.A | |
|6 | | AA83-00258A | CKD-IC;GC46C501G0 | 1 | S.N.A | |
|6 | | AA83-00259A | CKD-CHIP-RESISTOR;RC2012J,0R0CS | 1 | S.N.A | |
|6 | | AA83-00260A | CKD-CHIP-CAPACITOR;CL 21C 104ZBC NNNC | 1 | S.N.A | |
|6 | | AA83-00261A | CKD-RESONATOR;ZTT3.64MG | 1 | S.N.A | |
|6 | | AA83-00262A | CKD-ELE-CAPACITOR;SHL 16V 47uF 5.0Φ | 1 | S.N.A | |
|6 | | AA83-00310A | CKD-PCB;BN59-00678A | 1 | S.N.A | |
|6 | | AA83-00323A | CKD-B/SPRING - (+);BN59-00678A | 1 | S.N.A | |
|6 | | AA83-00324A | CKD-B/SPRING - (-);BN59-00678A | 1 | S.N.A | |
|5 | T0501 | AA63-01682A | COVER-TOP;TM95,ABS +PMMA,HB,BLACK | 1 | S.A | |
|5 | T0531 | AA63-01690A | COVER-BOTTOM;TM95,ABS +PMMA,HB,BLACK | 1 | S.A | |
|5 | M0006 | AA63-01687A | COVER-REAR SUB;TM95,ABS +PMMA,HB,BLACK | 1 | S.N.A | |
|5 | T0603 | AA64-04519A | WINDOW-RMC;TM95,PC,HB,VIOLET | 1 | S.N.A | |
| ...3 | | BN68-01812A | MANUAL FLYER-02,QSG;T200M,T220M,SyncMast | 1 | S.N.A | |
| | | | | | | |

5. Exploded View & Part List

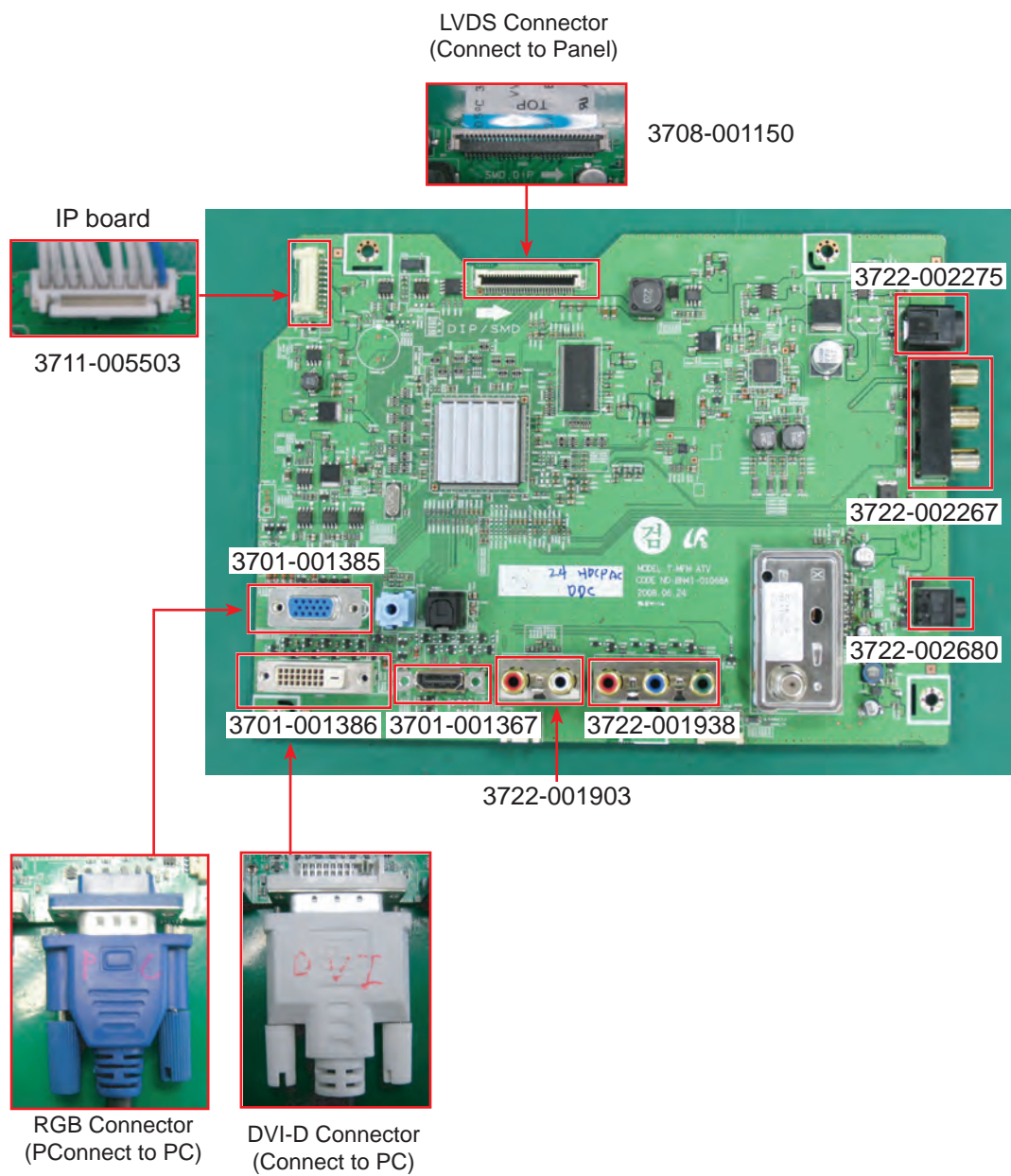
| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|-------|--------------|-------------|--|------|--------|--------|
| 0.1 | M0003 | BN92-04235A | ASSY BOX;LS20TDSSUMZD | 1 | S.N.A | |
| ..2 | | BN69-03094B | BOX-SET;T200M,CB,A-01,SW-50,W547,D491,H1 | 1.02 | S.N.A | |

6. Wiring Diagram

6-1. Wiring Diagram - Main Board





6-2. Wiring Diagram - IP Board



6-3. Connector Functions

| Connector | Functions |
|-----------|--|
| CN5002 | Transmits LVDS signals from the Main board to the panel * When a problem occurs: The Blank Screen and No Power errors may occur. |
| CN3000 | VGA signal input terminal * When a problem occurs: The No RGB Output error may occur. |
| CN9001 | DVI signal input terminal * When a problem occurs: The No DVI Output error may occur. |
| CN3001 | HDMI signal input terminal * When a problem occurs: The No HDMI Output error may occur. |
| CN1001 | Supplies 5V and 13V from the Power board to the Main board. Receives and transmits the PWM output to the Inverter. * When a problem occurs: The Blank Screen and No Power errors may occur. |
| CN4002 | Component input terminal. * When a problem occurs: The No Component Video Input error may occur. |
| JA3003 | PC Audio input terminal. * When a problem occurs: The No PC Sound Output error may occur. |
| OP4001 | Digital Audio output terminal. * When a problem occurs: The No Digital Audio Operating error may occur. |
| CN4001 | Component Audio input terminal. * When a problem occurs: The No Component Sound Output error may occur. |
| CN2003 | Headphone output terminal. |

6-4. Cables

| Use | LVDS 30P FFC cable | |
|-------|---|---|
| Code | 20" : BN96-07252B | 22" : BN96-07252D |
| Photo |  |  |

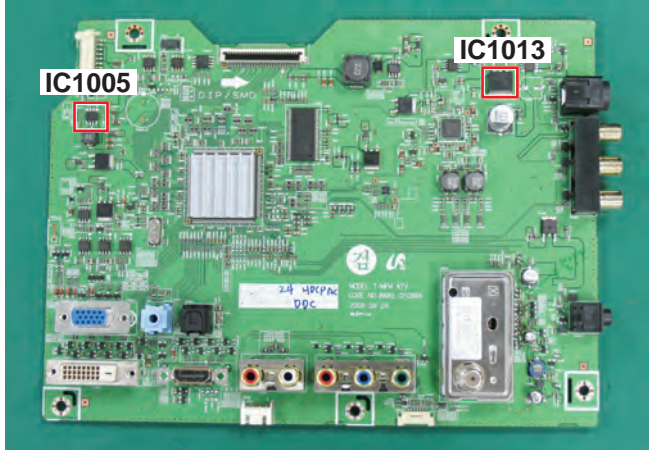
Memo

4. Troubleshooting

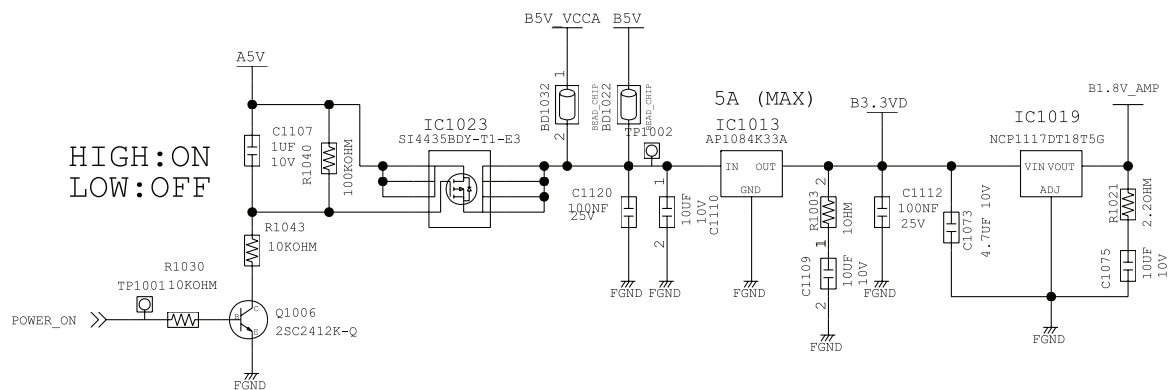
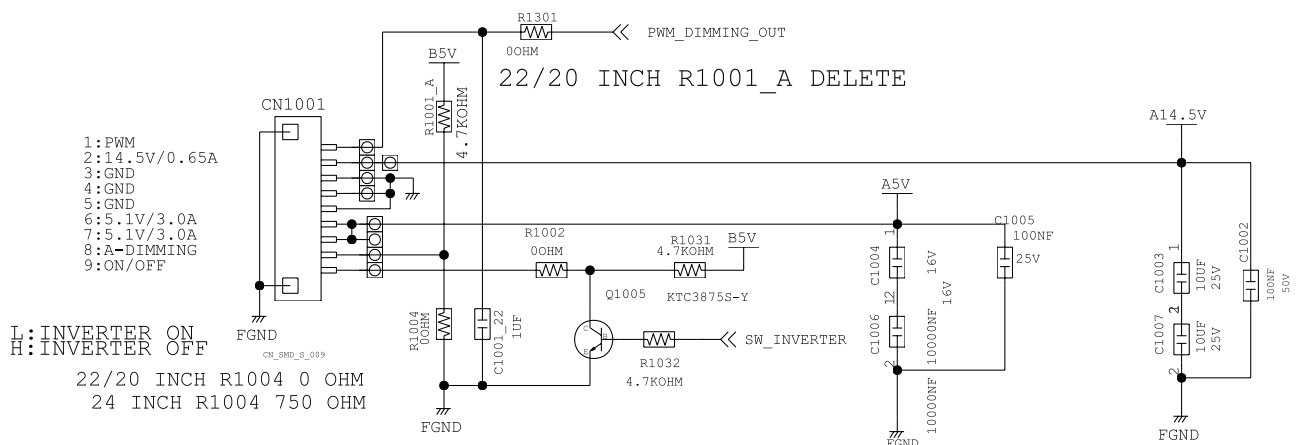
4-1. First Checklist for Troubleshooting

1. Check the various cable connections first.
 - Check to see if there is a burnt or damaged cable.
 - Check to see if there is a disconnected cable connection or a connection is too loose.
 - Check to see if the cables are connected according to the connection diagram.
2. Check the power input to the Main Board.
3. Check the following circuits.
 - No raster appears: Function PBA, Main PBA, I/P PBA
 - 55V develop but no screen: Main PBA
 - 5V does not develop: I/P PBA
4. Check the voltage in and out between the IP↔ Main Board, between the IP↔ Panel, and between the Main LVDS Boards.

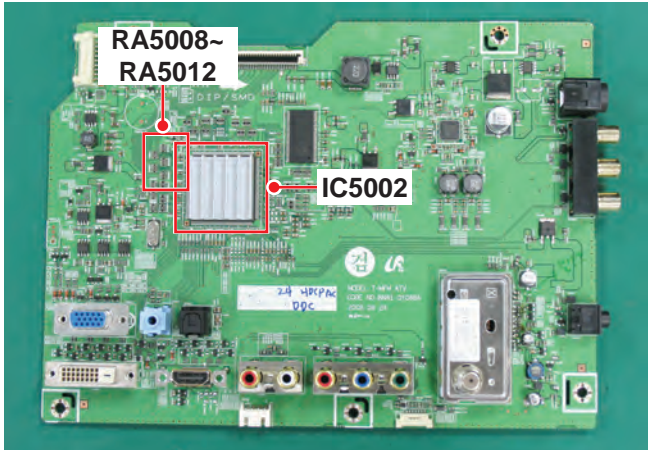
4-2. No Power

| | |
|-------------------|--|
| Symptom | <ul style="list-style-type: none"> Though the power switch on, the LED power off and the screen is blank. |
| Major checkpoints | <ul style="list-style-type: none"> Check Power cable. Check whether the Lamp connector is connected correctly to the IP. Check whether the power cable is connected correctly to the MAIN. Check whether the Function cable is connected correctly to the MAIN. |
| Diagnostics | <div style="text-align: center;">  <p>Main Board Front</p> </div> <pre> graph TD Q1[Does Power indicator LED Off ?] -- No --> A1[Check a connection a power cable.] Q1 -- Yes --> Q2[Does proper DC 14.5V appear at C1002.] Q2 -- No --> A2[Change a Assy PCB Power.] Q2 -- Yes --> Q3[Does proper DC5V appear at C1004?] Q3 -- No --> A3[Change a Assy PCB Power.] Q3 -- Yes --> Q4[Does proper DC3.3V, 1.2v appear at 1112, C1052?] Q4 -- No --> A4[Check IC1013, IC1005. Change a main PBA.] Q4 -- Yes --> Q5[A power is supplied to set?] Q5 -- No --> A5[Check a other function.(No picture part) Replace a lcd panel.] </pre> |
| Caution | Make sure to disconnect the power before working on the IP board. |

4-2-1. Circuit diagrams when the power does not turn on

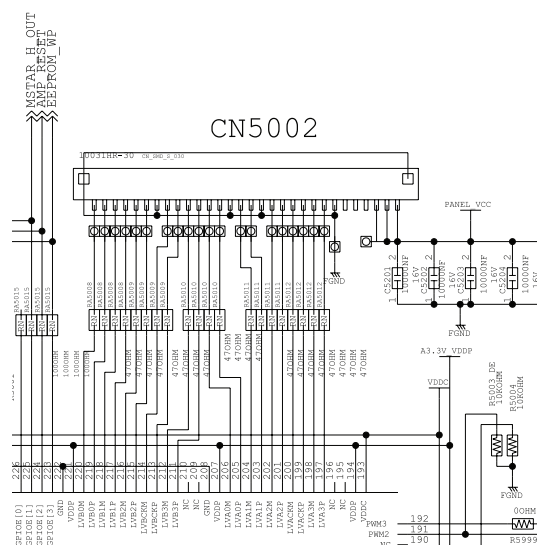
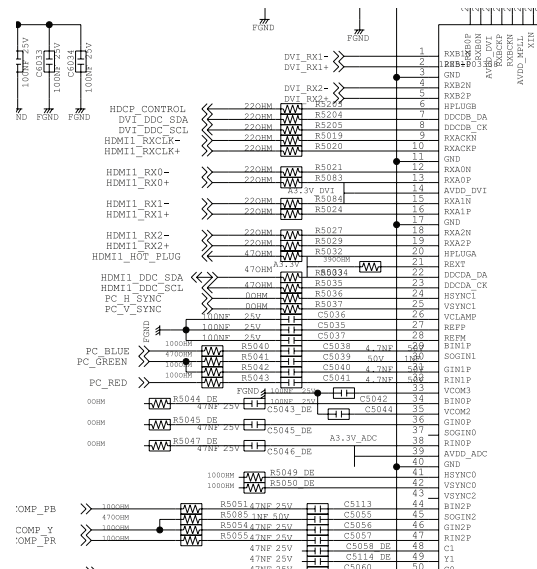
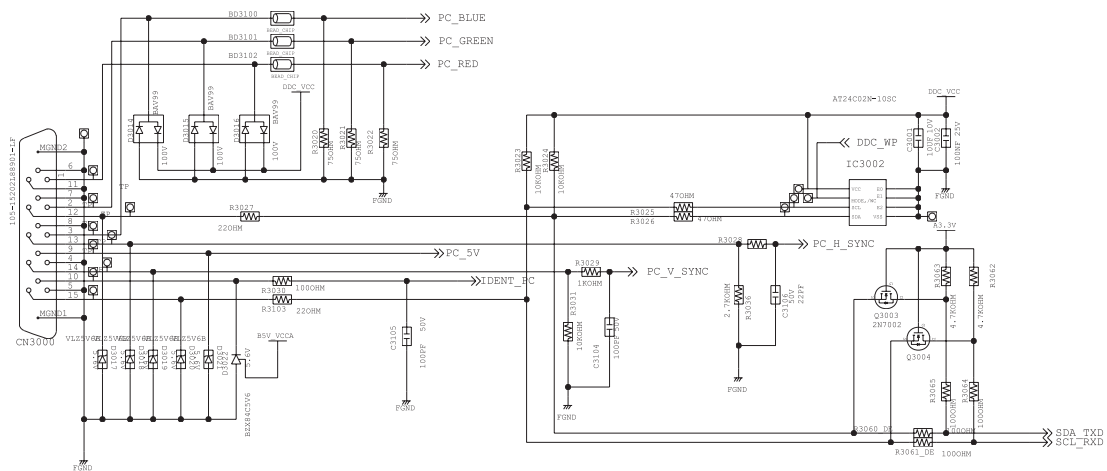


4-3. No Video (Analog PC)

| | |
|-------------------|---|
| Symptom | <ul style="list-style-type: none"> Though the LED power turns on, the screen is blank when connecting the VGA cable. |
| Major checkpoints | <ul style="list-style-type: none"> Even though the LED power turns on, the screen is blank when connecting the VGA cable. Check the D-sub cable connections. Check whether the LVDS cable is connected correctly to the panel. Check whether the lamp connector of the panel is connected correctly to the IP board. |
| Diagnostics | <div style="text-align: center;">  <p>Main Board Front</p> </div> <pre> graph TD A[Power Indicator is off. Lamp on, no video.] -- Yes --> B[Check a PC source and check the connection of DSUB cable?] B -- No --> C[Input a analog PC signal and connected cable(DPMS).] B -- Yes --> D[① Does the signal appear at R3020, R3021,R3022?] D -- No --> E[PC cable. Change a PC cable. Change a main PCB ass'y.] D -- Yes --> F[Does the digital data appear at the output of RA5008~RA5012?] F -- No --> G[Check IC5002. Change a main PBA.] F -- Yes --> H[Check a LVDS cable? Replace a lcd panel?] H -- No --> I[Please, Call to Samsung Co. LTD.] </pre> |
| Caution | Make sure to disconnect the power before working on the IP board. |

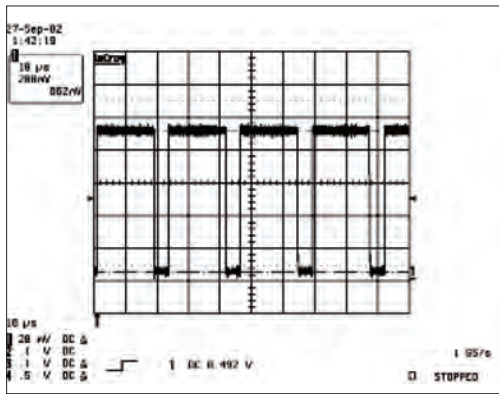
4-3-1. Circuit diagrams and waveforms (Analog) when no screen is displayed on the monitor

DSUB_INPUT



4-3-2. Waveforms when no screen is displayed (Analog PC)

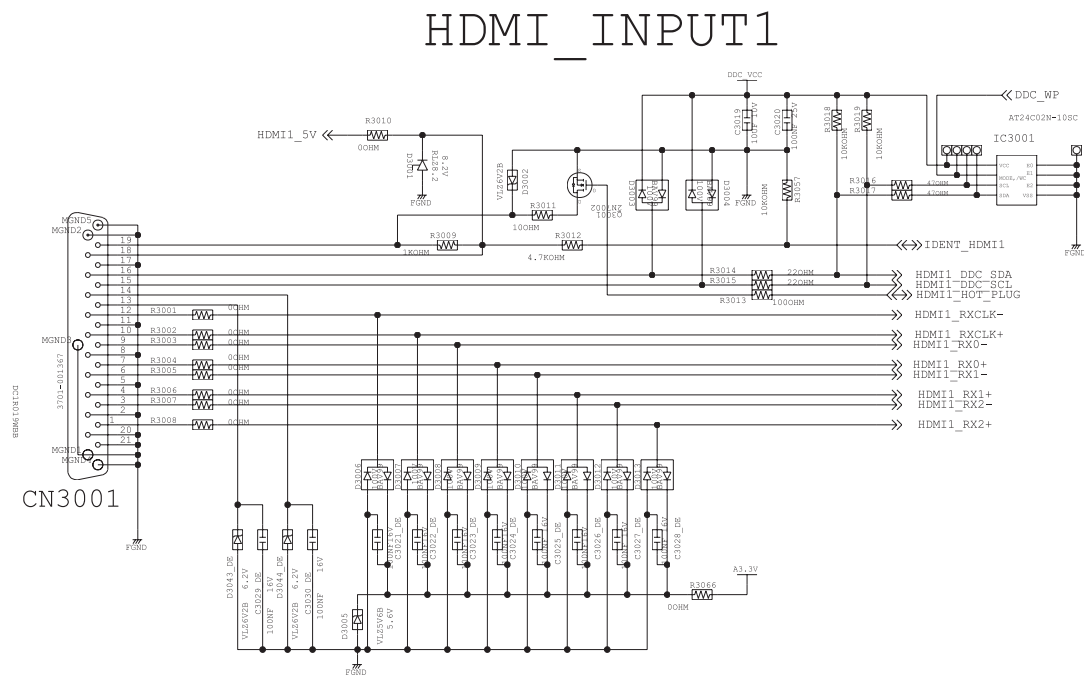
① R,G,B Output Signal of IC5002



4-4. No Video (Digital-HDMI)

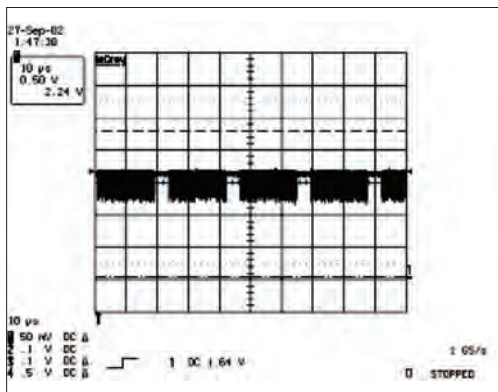
| | |
|-------------------|---|
| Symptom | <ul style="list-style-type: none"> The LED power turns on but the screen is blank when the DVI cable or HDMI cable is connected. |
| Major checkpoints | <ul style="list-style-type: none"> Even though the LED power turns on, the screen is blank when connecting the DVI cable or HDMI cable. Check the DVI cable or HDMI cable connections. Check whether the LVDS cable is connected correctly to the panel. Check whether the lamp connector of the panel is connected correctly to the IP board. |
| Diagnostics | <div data-bbox="574 495 1225 947" data-label="Image"> </div> <p style="text-align: center;">Main Board Front</p> <pre> graph TD A[Power Indicator is off. Lamp on, no video.] -- Yes --> B[Check the connection of HDMI cable?] B -- No --> C[Input a HDMI cable.] B -- Yes --> D[② Does the digital data appear at D3006~D3013 (HDMI1)?] D -- No --> E[Check HDMI cable. Change the cable.] D -- Yes --> F[Does the digital data appear at output of IC5002?] F -- No --> G[Check the IC5002. Change a main PBA.] F -- Yes --> H[Check a LVDS cable? Replace lcd panel?] H -- No --> I[Please, Call to Samsung Co. LTD.] </pre> |
| Caution | Make sure to disconnect the power before working on the IP board. |

4-4-1. Circuit diagrams and waveforms (Digital-HDMI) when no screen is displayed on the monitor

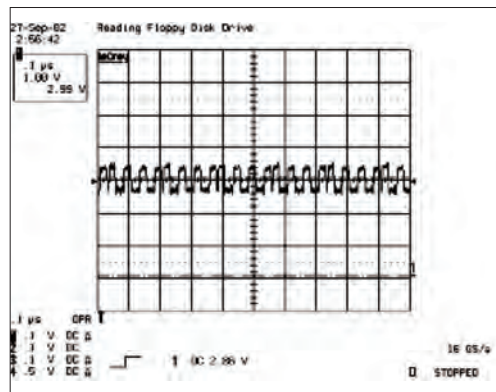


4-4-2. Waveforms when a blank screen is displayed (Digital-HDMI)

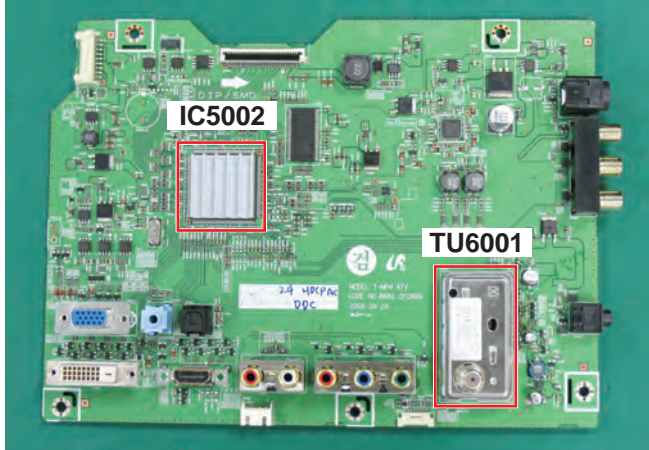
② Digital Output Data of IC3250



③ Signal of HDMI(Data)



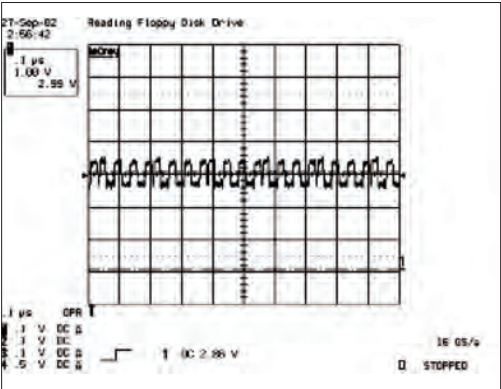
4-5. No Picture (Tuner_CVBS)

| | |
|-------------------|---|
| Symptom | <ul style="list-style-type: none"> The LED power turns on but the screen is blank when the RF cable is connected. |
| Major checkpoints | <ul style="list-style-type: none"> Even though the LED power turns on, the screen is blank when connecting the RF cable. Check the RF cable connections. Check whether the LVDS cable is connected correctly to the panel. Check whether the lamp connector of the panel is connected correctly to the IP board. |
| Diagnostics | <div style="text-align: center;">  <p>Main Board Front</p> </div> <pre> graph TD Start[Power Indicator is off. Lamp on, no picture.] -- No --> RF[Connect the RF cable and check RF signal.] Start -- Yes --> Q1{④ Does the signal appear at L6001?} Q1 -- No --> Vcc[Check the Tuner Vcc 5V. Change a main PBA.] Q1 -- Yes --> Q2{④ Does the signal appear at #9 of TU6001?} Q2 -- No --> PCB[Change a main PCB ass'y.] Q2 -- Yes --> Q3{③ Does the digital data appear at output of RA5008 ~RA5012?} Q3 -- No --> IC[Check a IC5002. Change a main PCB ass'y.] Q3 -- Yes --> Q4{Check a LVDS cable? Replacea lcd panel?} Q4 -- No --> Samsung[Please, Call to Samsung Co. LTD.] </pre> |
| Caution | Make sure to disconnect the power before working on the IP board. |

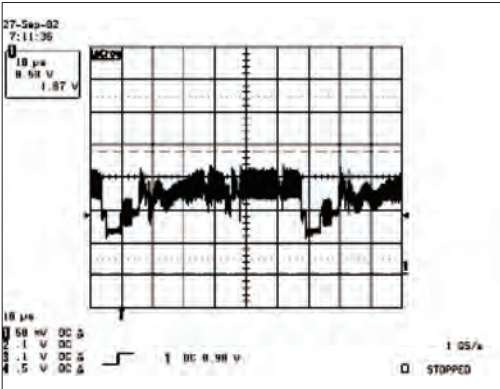
[illegible]

4-5-2. Waveforms when a blank screen is displayed (Tuner_CVBS)

③ CVBS Output Signal



④ Tuner_CVBS Output Signal



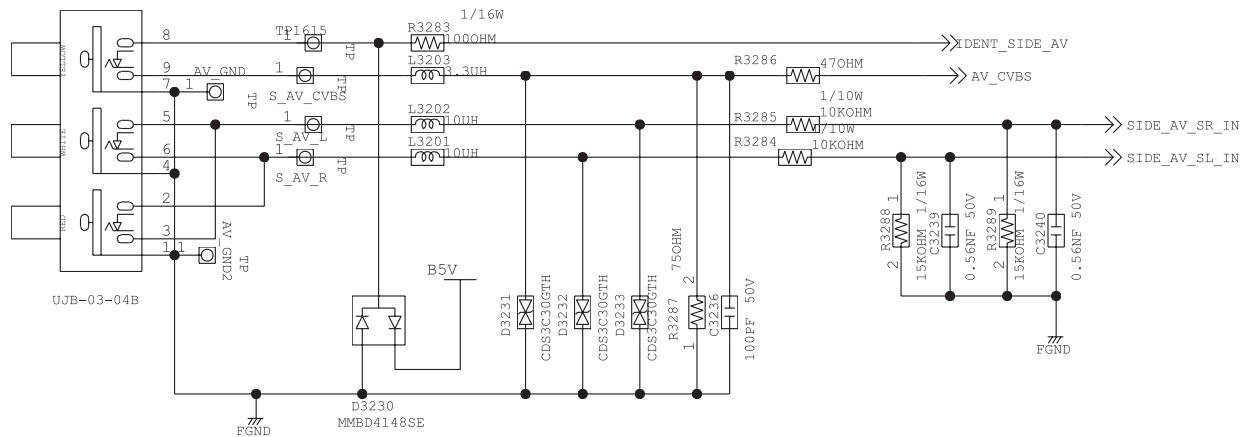
4-6. No Picture (AV)

| | |
|-------------------|---|
| Symptom | <ul style="list-style-type: none"> The LED power turns on but the screen is blank when the Antenna Cable is connected. |
| Major checkpoints | <ul style="list-style-type: none"> Even though the LED power turns on, the screen is blank when connecting the Antenna Cable. Check the Antenna Cable connections. Check whether the LVDS cable is connected correctly to the panel. Check whether the lamp connector of the panel is connected correctly to the IP board. |
| Diagnostics | <div data-bbox="576 468 1227 918"> </div> <div data-bbox="766 936 1038 976"> <p>Main Board Front</p> </div> <pre> graph TD A[Power Indicator is off. Lamp on, No signal image.] -- No --> B[check antenna cable] A -- Yes --> C[④ Does the AV signal appear at #52pin of IC5002?] C -- No --> D[check antenna cable Change a main PBA] C -- Yes --> E[Check a LVDS cable? Replace lcd panel?] E -- No --> F[Please, Call to Samsung Co. LTD.] </pre> |
| Caution | Make sure to disconnect the power before working on the IP board. |

4-6-1. Circuit diagrams and waveforms (AV) when no screen is displayed on the monitor

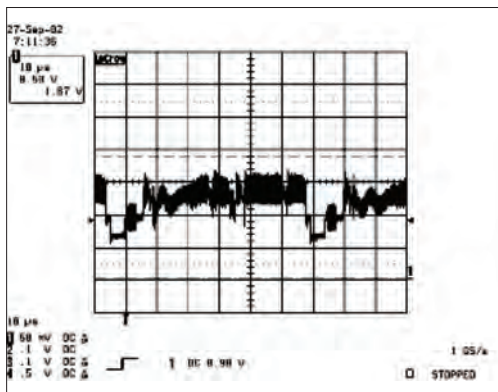
SIDE-AV
CN3002

3722-002267

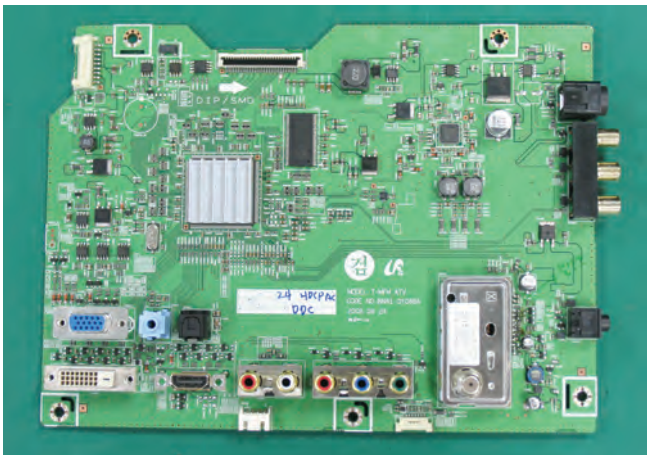


4-6-2. Waveforms when a blank screen is displayed (AV)

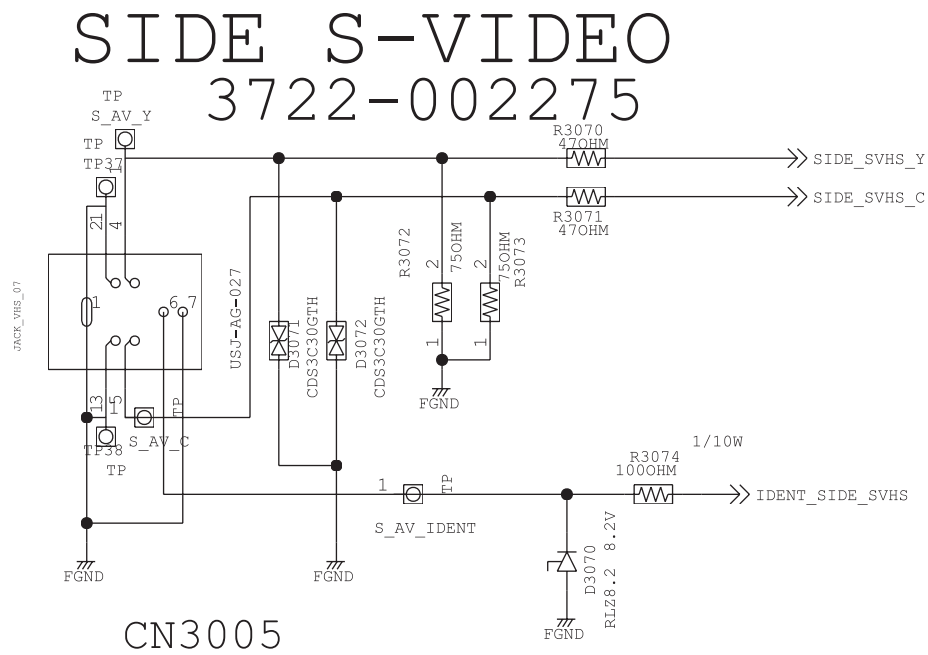
④ CVBS Output Signal



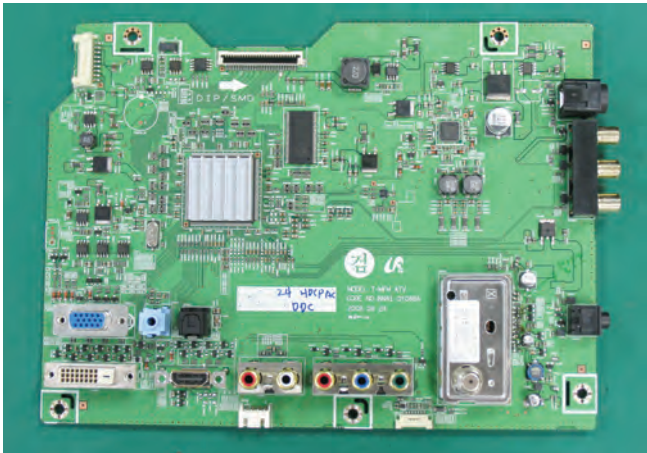
4-7. No Picture (S-VIDEO)

| | |
|-------------------|---|
| Symptom | <ul style="list-style-type: none"> The LED power turns on but the screen is blank when the Antenna Cable is connected. |
| Major checkpoints | <ul style="list-style-type: none"> Even though the LED power turns on, the screen is blank when connecting the Antenna Cable. Check the Antenna Cable connections. Check whether the LVDS cable is connected correctly to the panel. Check whether the lamp connector of the panel is connected correctly to the IP board. |
| Diagnostics | <div style="text-align: center;">  <p>Main Board Front</p> </div> <pre> graph TD A[Power Indicator is off. Lamp on, No signal image.] -- No --> B[check antenna cable] A -- Yes --> C[④ Does the S-VIDEO signal appear at #50, 51 pin of IC5002?] C -- No --> D[check antenna cable Change a main PBA] C -- Yes --> E[Check a LVDS cable? Replace lcd panel?] E -- No --> F[Please, Call to Samsung Co. LTD.] </pre> |
| Caution | Make sure to disconnect the power before working on the IP board. |

4-7-1. Circuit diagrams and waveforms (S-VIDEO) when no screen is displayed on the monitor



4-8. No Picture (Component)

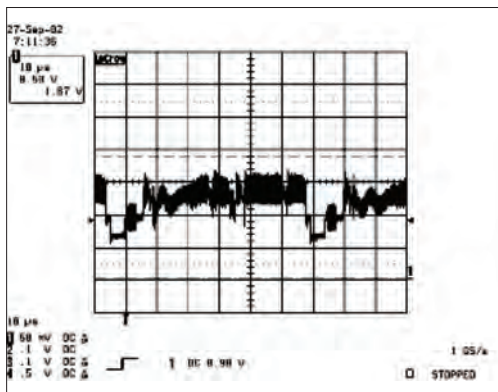
| | |
|-------------------|---|
| Symptom | <ul style="list-style-type: none"> The LED power turns on but the screen is blank when the Antenna Cable is connected. |
| Major checkpoints | <ul style="list-style-type: none"> Even though the LED power turns on, the screen is blank when connecting the Antenna Cable. Check the Antenna Cable connections. Check whether the LVDS cable is connected correctly to the panel. Check whether the lamp connector of the panel is connected correctly to the IP board. |
| Diagnostics | <div style="text-align: center;">  <p>Main Board Front</p> </div> <pre> graph TD A[Power Indicator is off. Lamp on, No signal image.] -- No --> B[check antenna cable] A -- Yes --> C[④ Does the Component signal appear at #44, 46, 47 pin of IC5002?] C -- No --> D[check antenna cable Change a main PBA] C -- Yes --> E[Check a LVDS cable? Replace lcd panel?] E -- No --> F[Please, Call to Samsung Co. LTD.] </pre> |
| Caution | Make sure to disconnect the power before working on the IP board. |

JACK_RCA_06_2P_MR

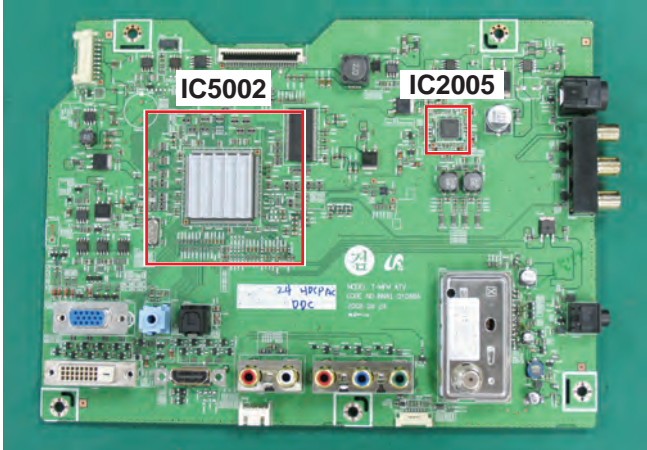


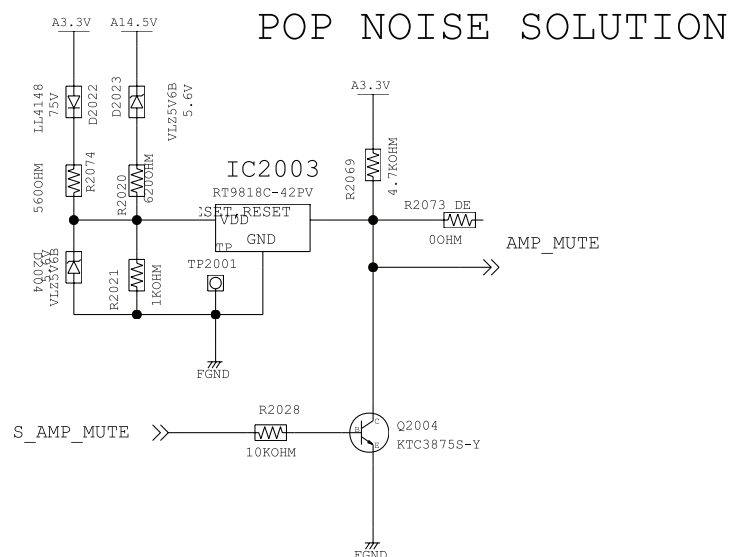
4-8-2. Waveforms when a blank screen is displayed (Component)

④ CVBS Output Signal



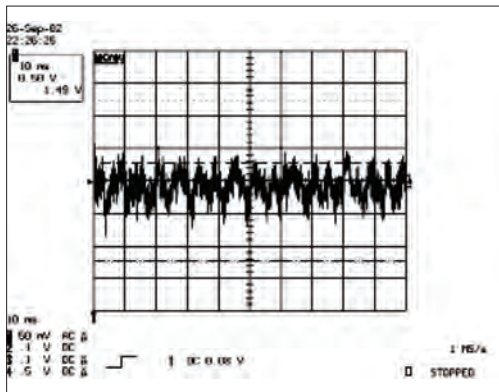
4-9. No Sound

| | |
|-------------------|---|
| Symptom | <ul style="list-style-type: none"> The LED power turns on but the screen is blank when the DVI cable is connected. |
| Major checkpoints | <ul style="list-style-type: none"> Even though the LED power turns on, the screen is blank when connecting the DVI cable. Check the DVI cable connections. Check whether the LVDS cable is connected correctly to the panel. Check whether the lamp connector of the panel is connected correctly to the IP board. |
| Diagnostics | <div style="text-align: center;">  <p>Main Board Front</p> </div> <pre> graph TD A[Picture is display, no sound.] -- No --> B[Connect a sound cable. control a volume.] A -- Yes --> C[⑥ Does the signal appear at Pin #71,72,73,74,76,77,78,79 of IC5002?] C -- No --> D[Check a connection harness.] C -- Yes --> E[Check the 3.3V of #25 IC2005.] E -- No --> F[check IC2003. Change a main PBA.] E -- Yes --> G[⑦ check output signal of #36,37,31,30,54,53,48,47 of IC2005] G -- No --> H[check IC2005.] G -- Yes --> I[Replace the speaker ass'y?] </pre> |
| Caution | Make sure to disconnect the power before working on the IP board. |

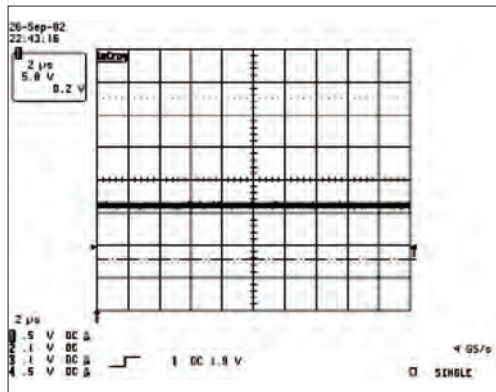


4-9-1. Waveforms when a blank screen is displayed (No Sound)



⑥ The Signal are Inputed to IC5002



⑦ DC 3.3V



4-10. Faults and Corrective Actions

| Fault Photo | Symptoms and Corrective Actions | Remarks |
|---|---|---|
|  | <p>Symptoms: DVI signals are not recognized.</p> <p>Causes: This fault occurs when the PC does not recognize the mode information because the DVI DDC has not been input to the monitor.</p> <p>Corrective Actions: Input the DVI DDC to the monitor.</p> | <p>* Refer to the Training Manual for information on inputting the DVI DDC.</p> |
|  | <p>Symptoms: When the monitor is turned on, only a full white pattern is displayed continually regardless of the signals.</p> <p>Causes: This fault occurs when only the lamp power is supplied and no video signals are input to the panel due to a fault or incorrect connections of the LVDS cable.</p> <p>Corrective Actions: Replace or reconnect the LVDS cable correctly so that video signals can be supplied to the panel.</p> | <p>* A full white pattern is a feature of the TN panel and is displayed when no video signals are supplied.</p> |
| | <p>Symptoms: When connecting the DVD, noise occurs on the screen.</p> <p>Causes: The HDCP key is not inserted.</p> <p>Corrective Actions: Enter the HDCP key. (See page 4-17.)</p> | |

4-11. Adjustment

4-11-1. Service Instruction

1. Usually, a color TV-VCR needs only slight touch-up adjustment upon installation.
Check the basic characteristics such as height, horizontal and vertical sync.
2. Use the specified test equipment or its equivalent.
3. Correct impedance matching is essential.
4. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test result.
5. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.
6. Do not attempt to connect or disconnect any wire while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.
7. To protect against shock hazard, use an isolation transform.

4-12. How to Access Service Mode

4-12-1. Entering Factory Mode

2. To enter "Service Mode" Press the remote -control keys in this sequence :
 - If you do not have Factory remote - control



- If you have Factory remote - control



- The buttons are active in the service mode.
1. Remote - Control Key : Power, Arrow Up, Arrow Down, Arrow Left
Arrow Right, Menu, Enter, Number Key(0~9)
 2. Function - Control Key : Power, CH +, CH -, VOL +, VOL -, Menu, TV/VIDEO(Enter)

4-13. Service Adjustment

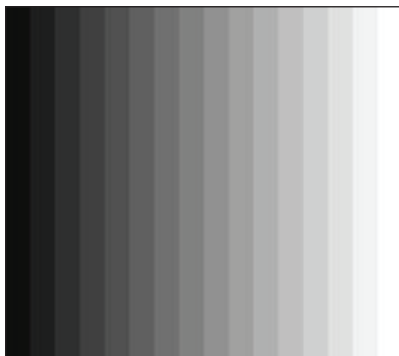
4-13-1. White Balance - Calibration

If picture color is wrong, do calibration first.

Equipment : CA210, Patten : chess pattern

Execute calibration in Factory Mode

Source PC : 1024*768/60Hz



(Gray patten)

4-13-2. White Balance - Adjustment

If picture color is wrong, check White Balance condition.

Equipment : CA210, Patten : Toshiba

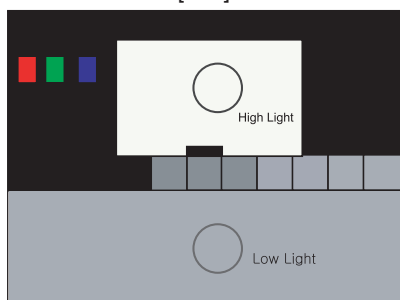
Adjust W/B in Factory Mode

Sub brightness and R/G/B Offset controls low light region

Sub contrast and R/G/B Gain controls high light region

Source AV : PAL composite, Component : 1280*720/60Hz

HDMI[DVI] : 1280*720/60Hz



Toshiba Patten

[Test Pattern : MSPG-945 Series Pattern #16]

*Color temperature

1500K +/-500, -6 ~-20 MPCD

*Color coordinate

H/L : 272/278 +/- 2 35.0 Ft +/- 2.0Ft

L/L : 272/278 +/- 3 1.5 Ft +/- 0.2Ft

4-13-3. Conditions for Measurement

1. On the basis of toshiba ABL pattern : High Light level (57 IRE)
- INPUT SIGNAL GENERATOR : MSPG-925LTH

* Mode NO 2 : 744X484@60 Hz
NO 6 : 1280X720@60 Hz
NO 21 : 1024X768@60 Hz

* Pattern NO 36 : 16 Color Pattern
NO 16 : Toshiba ABL Pattern

2. Optical measuring device : CA210 (FL)

Please use the MSPG-925 LTH generator for model LE26M51B/LE32M51B/LE40M51B/LE46M51B.

4-13-4. Method of Adjustment

1. Adjust the white balance of AV, Component Modes.

(AV→Component)

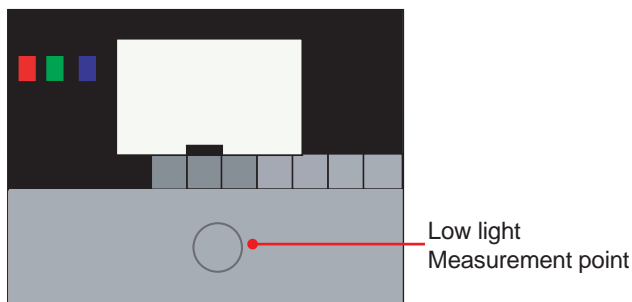
a) Set the input to the mode in which the adjustment will be made.
(RF→DTV→PC→DVI).

* Input signal - VIDEO Mode : Model #2 (744*484 Mode), Pattern #16
- DTV,DVI Mode : Model #6 (1280*720 Mode), Pattern #16
- HDMI Mode: Model #6(1280*720 Mode), Pattern #16

b) Enter factory color control, confirm the data.

c) Adjust the low light. (Refer to table 1, 2 in adjustment position by mode)

- Adjust sub - Brightness to set the 'Y' value.
- Adjust red offset ('x') and blue offset ('y') to the color coordinates.



Picture 4-2 Toshiba ABL Pattern

* Do not adjust green offset data.

d) Adjust the high light. (Refer to table 1, 2 in adjustment position by mode)

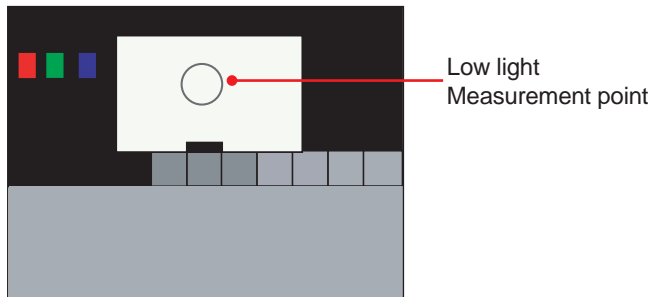
- Adjust red gain ('x') and blue gain ('y') to the color coordinates.

* Do not adjust the green gain and sub-contrast (Y) data.

d) Adjust the high light. (Refer to table 1, 2 in adjustment position by mode)

- Adjust red gain ('x') and blue gain ('y') to the color coordinates.

* Do not adjust the green gain and sub-contrast (Y) data.



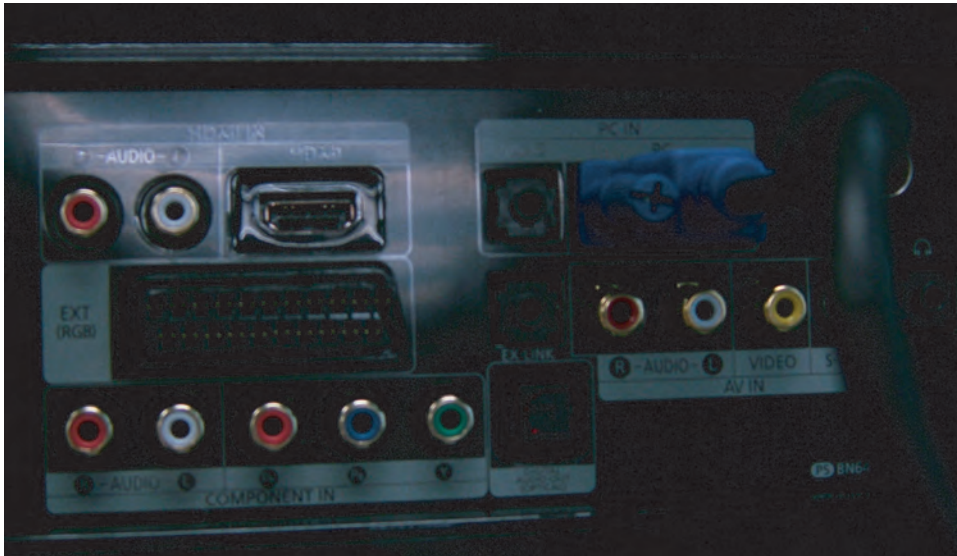
Picture 4-3 Toshiba ABL Pattern

4-14. Software Upgrade

4-14-1. How to Update Flash ROM

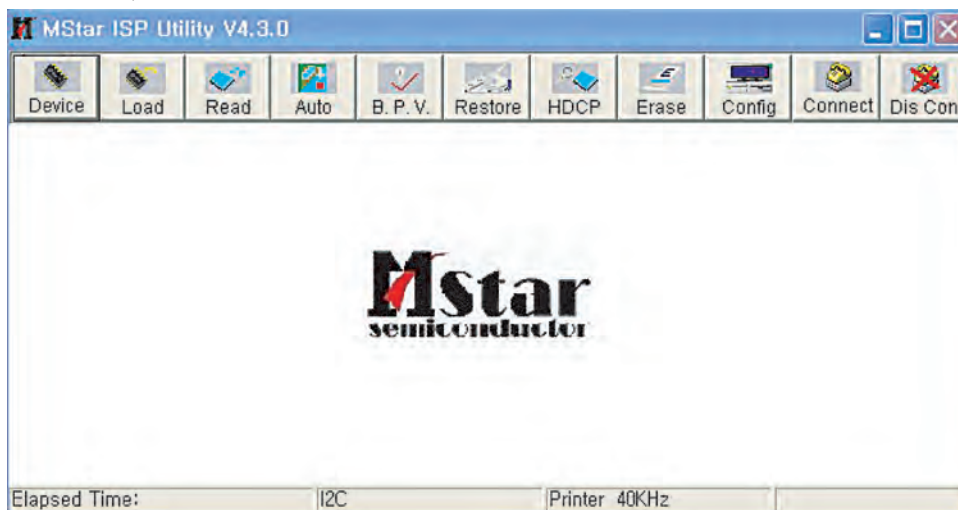
1. Install the Flash Downloader

Connector Set(D-SUB) and D-SUB cable to execute Program Update.



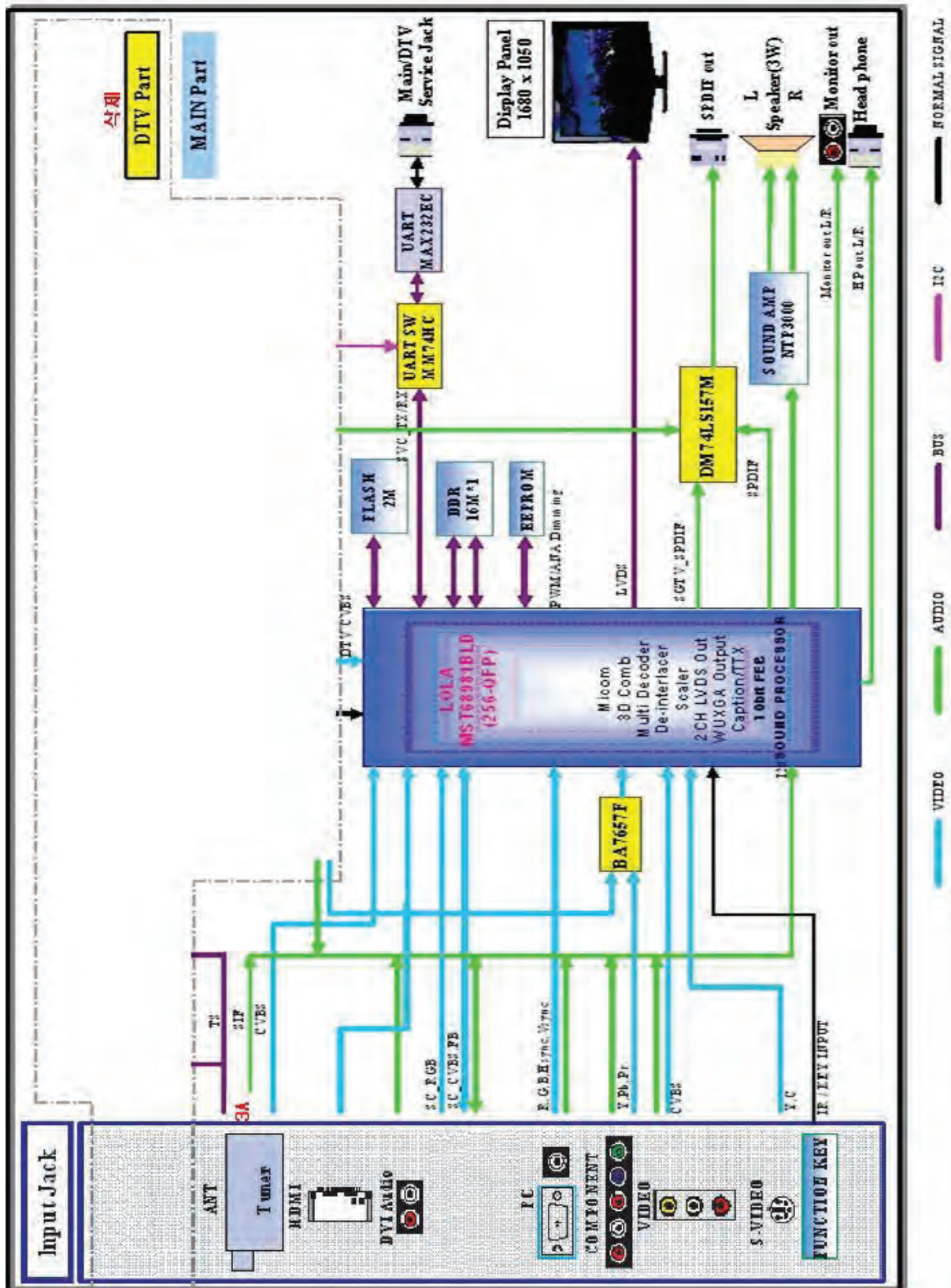
2. Flash Downloader program update

- Turn on the TV Set
- Click "Connect" icon on the MSTAR tool.
- Click "Read", and Choose a new S/W.
- Click "Auto", and "Run"

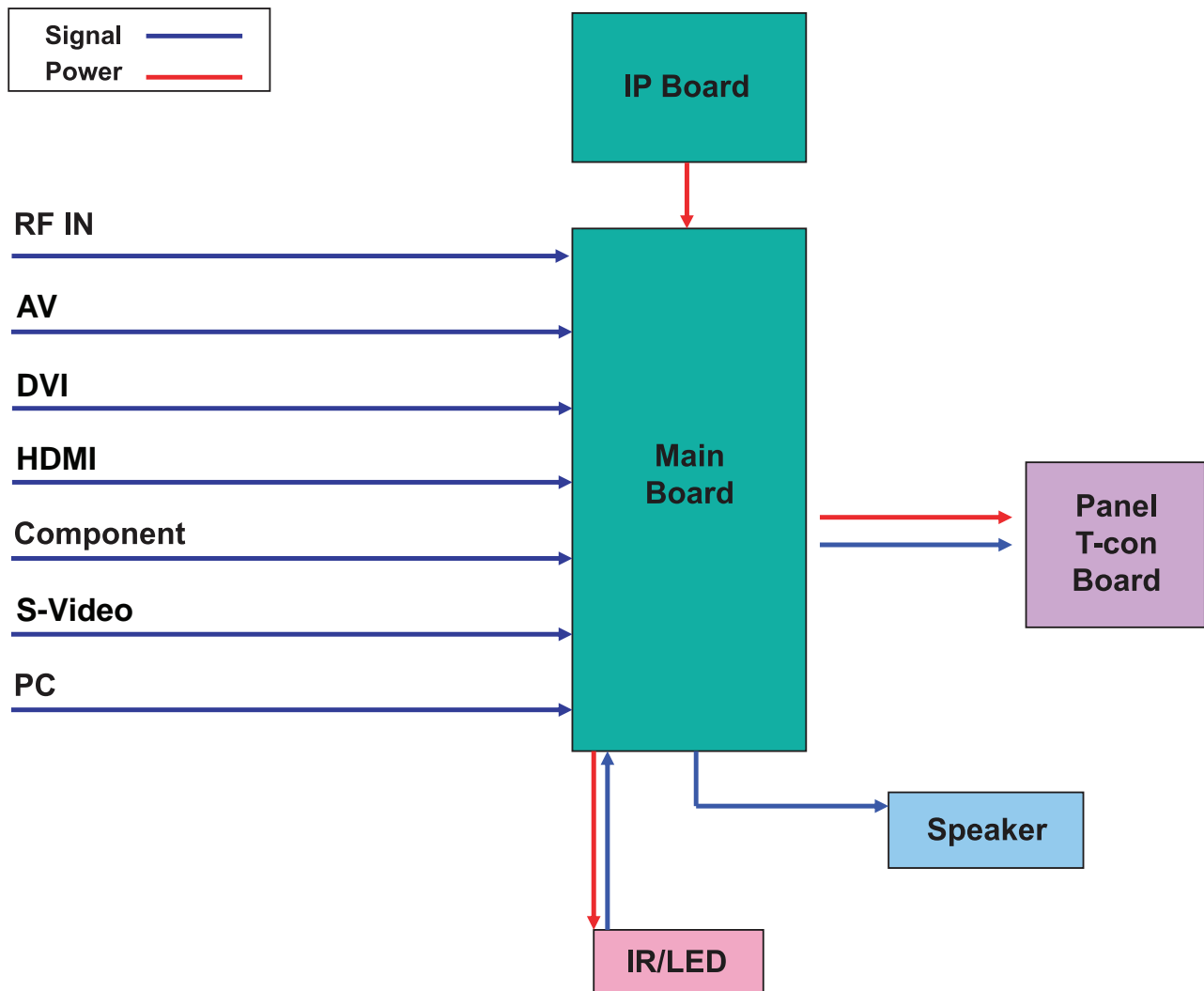


7. Schematic Diagram

7-1. Circuit Descriptions



7-2. Block description

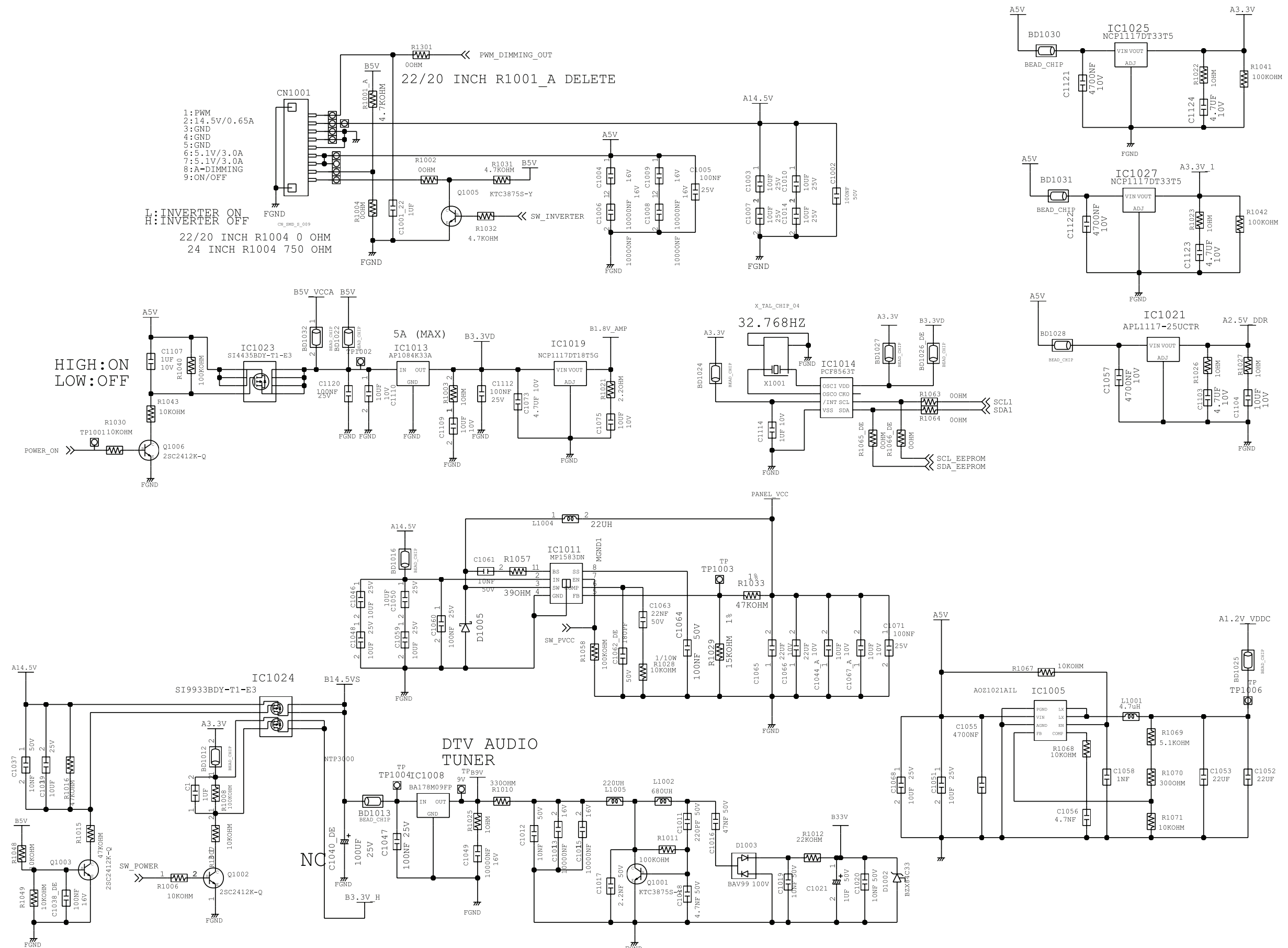


T-MFM consists of three main blocks

1. Main board : Video signal processing
2. IP board : Power supply & Inverter
3. T-con board : LCD Panel control

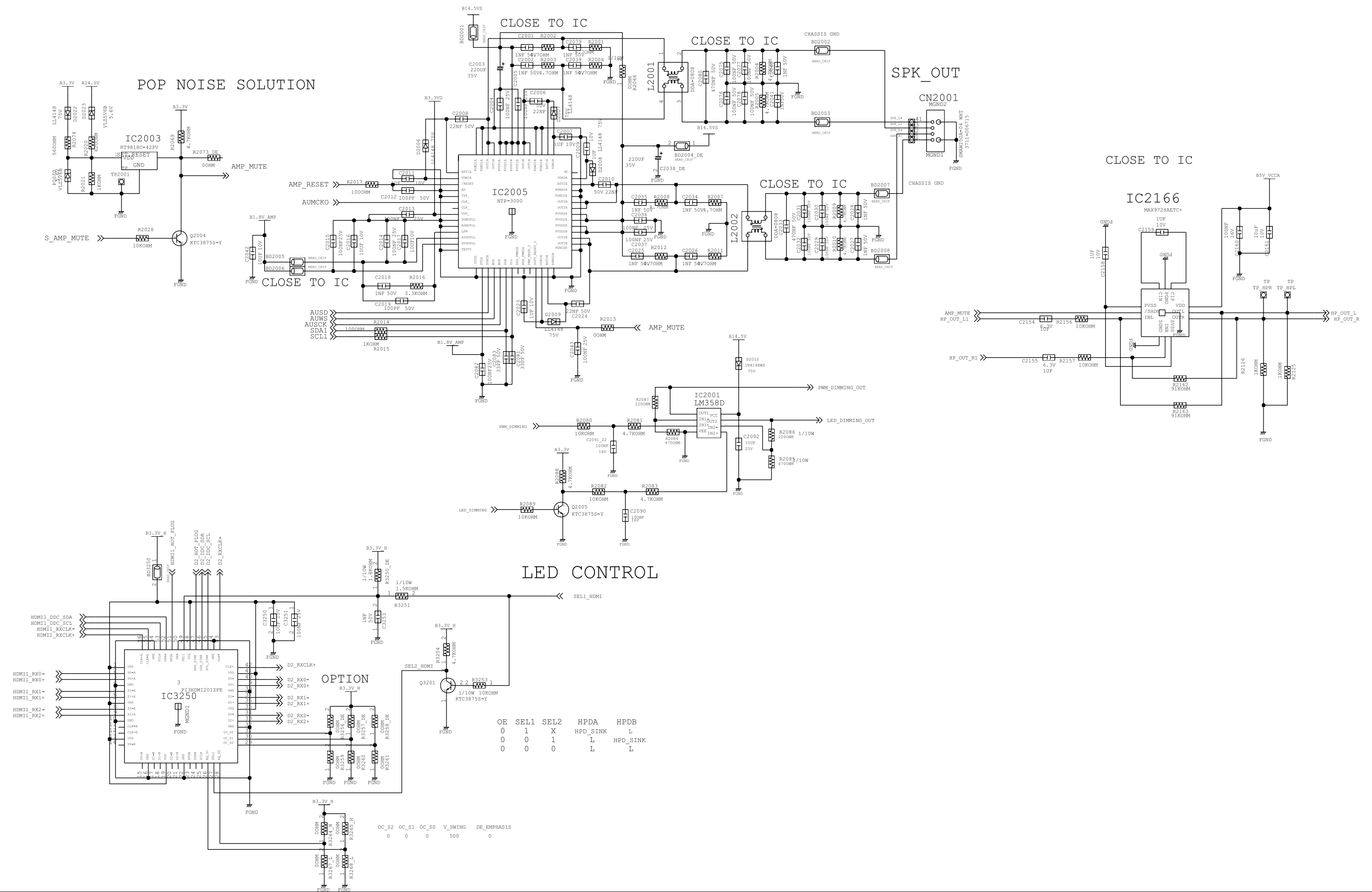
7-3. Schematic Diagrams

This Document can not be used without Samsungs authorization.



7. Schematic Diagrams

This Document can not be used without Samsungs authorization.



7. Schematic Diagrams

This Document can not be used without Samsungs authorization.

